



SCOPING OPINION

Proposed Avon Power Station



March 2015



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EXECUTIVE SUMMARY

This is the Scoping Opinion (the Opinion) provided by the Secretary of State in respect of the content of the Environmental Statement for the proposed Avon Power Station at Severnside near Bristol.

This report sets out the Secretary of State's opinion on the basis of the information provided in the Scottish Power ('the applicant') report entitled Avon Power Station EIA Scoping Report (January 2015) ('the Scoping Report'). The Opinion can only reflect the proposals as currently described by the applicant.

The Secretary of State has consulted on the Scoping Report and the responses received have been taken into account in adopting this Opinion. The Secretary of State is satisfied that the topic areas identified in the Scoping Report encompass those matters identified in Schedule 4, Part 1, paragraph 19 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended).

The Secretary of State draws attention both to the general points and those made in respect of each of the specialist topic areas in this Opinion. The main potential issues identified are:

- flood risk
- impacts on hydrogeology and land contamination
- emissions to air and water; and
- Impacts on ecology.

Matters are not scoped out unless specifically addressed and justified by the applicant, and confirmed as being scoped out by the Secretary of State.

The Secretary of State notes the potential need to carry out an assessment under the Habitats Regulations¹.

¹ The Conservation of Habitats and Species Regulations 2010 (as amended)

1.0 INTRODUCTION

Background

- 1.1 On 27 January 2015, the Secretary of State (Secretary of State) received the Scoping Report submitted by Scottish Power under Regulation 8 of the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (SI 2263) (as amended) (the EIA Regulations) in order to request a scoping opinion for the proposed Avon Power Station ('the Project'). This Opinion is made in response to this request and should be read in conjunction with the applicant's Scoping Report.
- 1.2 The applicant has formally provided notification under Regulation 6(1)(b) of the EIA Regulations that it proposes to provide an ES in respect of the proposed development. Therefore, in accordance with Regulation 4(2)(a) of the EIA Regulations, the proposed development is determined to be EIA development.
- 1.3 The EIA Regulations enable an applicant, before making an application for an order granting development consent, to ask the Secretary of State to state in writing their formal opinion (a 'scoping opinion') on the information to be provided in the environmental statement (ES).
- 1.4 Before adopting a scoping opinion the Secretary of State must take into account:
 - (a) the specific characteristics of the particular development;
 - (b) the specific characteristics of the development of the type concerned; and
 - (c) environmental features likely to be affected by the development'.

(EIA Regulation 8 (9))
- 1.5 This Opinion sets out what information the Secretary of State considers should be included in the ES for the proposed development. The Opinion has taken account of:
 - i the EIA Regulations
 - ii the nature and scale of the proposed development
 - iii the nature of the receiving environment, and
 - iv current best practice in the preparation of environmental statements.

- 1.6 The Secretary of State has also taken account of the responses received from the statutory consultees (see Appendix 2 of this Opinion). The matters addressed by the applicant have been carefully considered and use has been made of professional judgement and experience in order to adopt this Opinion. It should be noted that when it comes to consider the ES, the Secretary of State will take account of relevant legislation and guidelines (as appropriate). The Secretary of State will not be precluded from requiring additional information if it is considered necessary in connection with the ES submitted with that application when considering the application for a development consent order (DCO).
- 1.7 This Opinion should not be construed as implying that the Secretary of State agrees with the information or comments provided by the applicant in their request for an opinion from the Secretary of State. In particular, comments from the Secretary of State in this Opinion are without prejudice to any decision taken by the Secretary of State (on submission of the application) that any development identified by the applicant is necessarily to be treated as part of a nationally significant infrastructure project (NSIP), or associated development, or development that does not require development consent.
- 1.8 Regulation 8(3) of the EIA Regulations states that a request for a scoping opinion must include:
- (a) 'a plan sufficient to identify the land;
 - (b) a brief description of the nature and purpose of the development and of its possible effects on the environment; and
 - (c) such other information or representations as the person making the request may wish to provide or make'.
- (EIA Regulation 8 (3))*
- 1.9 The Secretary of State considers that this has been provided in the applicant's Scoping Report.

The Secretary of State's Consultation

- 1.10 The Secretary of State has a duty under Regulation 8(6) of the EIA Regulations to consult widely before adopting a scoping opinion. A full list of the consultation bodies is provided at Appendix 1. The list has been compiled by the Secretary of State under their duty to notify the consultees in accordance with Regulation 9(1)(a). The applicant should note that whilst the Secretary of State's list can inform their consultation, it should not be relied upon for that purpose.

- 1.11 The list of respondents who replied within the statutory timeframe and whose comments have been taken into account in the preparation of this Opinion is provided at Appendix 2 along with copies of their comments, to which the applicant should refer in undertaking the EIA.
- 1.12 The ES submitted by the applicant should demonstrate consideration of the points raised by the consultation bodies. It is recommended that a table is provided in the ES summarising the scoping responses from the consultation bodies and how they are, or are not, addressed in the ES.
- 1.13 Any consultation responses received after the statutory deadline for receipt of comments will not be taken into account within this Opinion. Late responses will be forwarded to the applicant and will be made available on the Planning Inspectorate's website. The applicant should also give due consideration to those comments in carrying out the EIA.

Structure of the Document

- 1.14 This Opinion is structured as follows:

Section 1 Introduction

Section 2 The proposed development

Section 3 EIA approach and topic areas

Section 4 Other information.

This Opinion is accompanied by the following Appendices:

Appendix 1 List of consultees

Appendix 2 Respondents to consultation and copies of replies

Appendix 3 Presentation of the environmental statement.

2.0 THE PROPOSED DEVELOPMENT

Introduction

- 2.1 The following is a summary of the information on the proposed development and its site and surroundings prepared by the applicant and included in their Scoping Report. The information has not been verified and it has been assumed that the information provided reflects the existing knowledge of the proposed development and the potential receptors/resources.

The Applicant's Information

Overview of the proposed development

- 2.2 The proposed development is a Combined Cycle Gas Turbine (CCGT) and Fast Response Generator Power Station with a combined capacity of 1800MW and associated infrastructure including water, gas and electricity connections.

Description of the site and surrounding area

The Application Site

- 2.3 The general location of the site is illustrated on Figure 1 in the Scoping Report. The proposed site boundary of the power station and the indicative corridors for the water, gas and electricity connections are illustrated on Figure 2.
- 2.4 The proposed development would be located in the administrative areas of South Gloucestershire Council and Bristol City Council.
- 2.5 The proposed power station site was formally used as a fertiliser manufacturing and storage facility. Some buildings and structures associated with this land use remain on site, with the remainder covered by areas of hardstanding, grassed areas and shrub vegetation. Underground utilities infrastructure also remains on the proposed power station site. Central Avenue, an un-adopted road runs along the northern boundary of the site.
- 2.6 The proposed power station site is located in Flood Zone 3. Two water drainage reservoirs are located on the proposed power station site (Redwick and Severnside) and a drainage channel known as the Central Rhine is located along the northern boundary of the site. A further drainage channel known as Red Rhine runs between the proposed power station site and the nearby Seabank Power Station.
- 2.7 The boundary of the proposed power station site extends into the Severn Estuary. The Severn Estuary is designated as a Special

Area of Conservation (SAC), Special Protection Area (SPA) and Site of Special Scientific Interest (SSSI).

The Surrounding Area

- 2.8 The locations of key environmental designations in relation to the proposed power station site are identified on Figures 5 and 5A in the Scoping Report.
- 2.9 The land uses in the immediate vicinity of the proposed power station site include:
- AsraZeneca complex (Avlon Works) to the north
 - Severnside Distribution Land Ltd comprising of distribution and storage units to the east (known as Central Park)
 - Avonmouth LNG Terminal and Hallen Industrial Estate to the southeast
 - SITA energy from waste plant to the south; and,
 - Seabank (1 and 2) power stations to the southwest.
- 2.10 A number of residential areas are located within a 2.5km radius of the site (see Scoping Report Figure 5). In addition, there are a number of farms located within 500m-1.5km radius of the site.
- 2.11 The nearest residential areas to the proposed power station site are listed in paragraph 2.14 of the Scoping Report.
- 2.12 Four Sites of Importance for Nature Conservation (SINCs) (unnamed) are located within 2km of the site. The nearest is located 1.2km from the proposed power station site beyond the M49 Motorway.
- 2.13 The Cribbs Causeway Air Quality Management Area (AQMA) is located 4km to the east of the proposed power station site.
- 2.14 Within a 5km radius of the proposed power station site there a number of heritage assets including scheduled ancient monuments and listed buildings (Scoping Report paragraph 2.16). There are a number of historic landscapes and Registered Parks and Gardens within a 10km radius of the proposed power station site (Scoping Report paragraph 6.107). The Wye Valley Area of Outstanding Natural Beauty (AONB) is located within 10km north of the proposed power station site.
- 2.15 The M49 Motorway is located approximately 1km to the east of the proposed power station site. Public Rights of Way (PRoW) in the area surrounding the proposed power station site are illustrated on Figure 5 of the Scoping Report. The Severn Way long distance path is located to the west of the proposed power station site.

Alternatives

- 2.16 A description of the project alternatives considered by the applicant to date is provided in Chapter 4 of the Scoping Report. Paragraph 4.1 of the Scoping Report confirms that alternatives have been considered in respect to:
- site selection
 - site layout; and
 - technologies.
- 2.17 Paragraph 4.2 of the Scoping Report confirms that the applicant intends to discount the need to consider the 'no development' alternative.
- 2.18 The Scoping Report confirms that a Best Available Techniques (BAT) appraisal process will be used to assist in assessing the alternatives.
- 2.19 The applicant intends to provide a detailed appraisal of the alternatives considered and outline the rationale for the final choice made in the ES.

Description of the proposed development

- 2.20 A description of the proposed development is provided in Chapter 3 of the Scoping Report. The potential development components include:
- two combined cycle gas turbines (CCGT) and associated steam turbines
 - fast response generators (peaking plant) comprising of up to two open cycle gas turbines (OCGTs) and associated bypass stacks
 - up to two turbine halls
 - up to two exhaust stacks
 - up to three electrical generators
 - cooling structures; either an air cooled condenser or hybrid cooling cells
 - additional structures including boiler plant, control rooms, water treatment plant, workshops, offices and parking.
 - electricity connection
 - gas supply connection
 - water supply connection
 - potential works to the existing River Severn outfall pipe to discharge water

- potential rail spur establishment; and
 - potential diversion of services and utilities infrastructure.
- 2.21 Two configuration options exist in relation to the CCGT units; a single shaft option or a multi-shaft option. Both options are described in paragraph 3.2-3.5 of the Scoping Report and clarify which individual components make up each configuration and the dimensions of each component.
- 2.22 Three options for the electricity connection are currently under consideration by the applicant (Scoping Report paragraph 3.22):
- connection to the existing National Grid 400kv overhead line located to the east of the site
 - connection to the existing Seabank substation located to the southwest of the site; or
 - connection to the Aust substation located 8km northeast of the site.
- 2.23 The exact infrastructure requirements (substations, transmission towers, above or below ground transmission cables) for the electricity connection would depend on the final option chosen.
- 2.24 A gas connection would be provided to the National Grid Gas Transmission Network. The connection would comprise a 900mm pipeline extending 1.5km east of the power station site connecting into 'Feeder 14' high pressure gas main.
- 2.25 Two options for the source of the water supply are currently under consideration by the applicant (Scoping Report paragraphs 3.25-3.26):
- connection to a Wessex Water wastewater treatment facility located 3.5km to the south of the site either via an upgrade to the pipe that supplies Seabank 1 and 2 Power Station or via a new pipeline route to the wastewater treatment facility; or
 - Connection to the Bristol Water operated Littleton Reservoir and adjacent wastewater treatment facility either through an upgrade to an existing water pipeline that runs from the site to the Littleton Treatment Works or via a new pipeline route.
- 2.26 If the hybrid cooling cells option is chosen, some of the abstracted water would need to be discharged from the site. If the water is sourced from the Wessex Water wastewater treatment facility, there is potential for the water to be discharged back to this facility. Alternatively, this could be discharged into the Severn Estuary via the existing outfall pipe providing any necessary repairs are carried out. Discharge to the Littleton Treatment Works

would not be possible and therefore if this option was chosen, the water would also be discharged into the River Severn.

- 2.27 Water used in the boiler blowdown may also be discharged into the Severn Estuary, or this could be discharged into the Central Rhine via the existing reservoirs on site subject to Environment Agency (EA) approval.
- 2.28 The applicant acknowledges that diversions of existing services and facilities on the proposed power station site may be required as part of the development and the extent of these works will be clarified once further investigation work has been undertaken.
- 2.29 Paragraph 3.8 of the Scoping Report confirms that land on the power station site has been allocated for the future siting of carbon capture and compression equipment, however the equipment would not form part of the DCO application.

Proposed access

- 2.30 Paragraph 3.7 of the Scoping Report confirms that the proposed power station site would be accessed from two points on Central Avenue located to the north of the development site. The access points are illustrated on Figure 6 in the Scoping Report. The western access point is currently in use and provides access to the existing site office and car park on the site. The eastern access is currently gated and would require reinstatement.
- 2.31 Paragraph 6.91 of the Scoping Report confirms that a new access road to the south of the site has been granted as part of the SITA Energy Recovery Centre planning consent. The landowner (Severnside Distribution Land Ltd) is also looking to extend this road further which could facilitate additional access to the proposed power station site from the south.
- 2.32 Paragraph 3.31 of the Scoping Report confirms that there is the potential to re-establish the existing rail sidings on the site to facilitate the importation of construction material, particularly if infill is required to raise ground levels to mitigate flood risk. The location of the existing rail sidings is provided on Figure 6 in the Scoping Report.
- 2.33 The potential access routes to facilitate the associated connections are not described in the Scoping Report.

Construction

- 2.34 The proposed development would be constructed in a single phase lasting 3 years. It is unclear if this timescale includes the site preparation works. The earliest construction start date would be 2018 with an anticipated commission date of 2021/2022.

- 2.35 Paragraph 3.42 of the Scoping Report confirms that details of the proposed construction activities and a phasing programme would be included in the ES. The location of the construction and laydown area is identified on Figure 6 of the Scoping Report.
- 2.36 Paragraph 3.38 of the Scoping Report confirms that as part of the site preparation works for the proposed power station site, ground levels may need to be raised or flood mitigation measures installed to protect the site from flood events.
- 2.37 800 daily vehicle movements are anticipated during the peak construction period. Paragraph 6.96 of the Scoping Report confirms that a Construction Traffic Management Plan (CTMP) would be adopted to deliver mitigation to minimise the impact of construction vehicle movements.
- 2.38 The Scoping Report confirms that a framework Construction Environmental Management Plan (CEMP) would be included in the DCO application and would provide an overview of the measures that would be adopted to mitigate the construction impacts. The framework CEMP would be secured through a DCO requirement.

Operation and maintenance

- 2.39 A description of the operational development is provided in paragraph 3.9-3.14 of the Scoping Report and a schematic diagram is provided in Figure 7.
- 2.40 Paragraph 3.5 of the Scoping Report confirms that the plant would be designed to operate for at least 25 years.
- 2.41 Paragraph 6.94 of the Scoping Report confirms that during the operational phase of the development a workforce of 40-60 people would be required and would work on a shift basis over a 24 hour period.

Decommissioning

- 2.42 Paragraph 3.45 of the ES confirms that once the 25 year design life has expired, if it is not appropriate to continue the operation of the power station the site would be decommissioned. The Scoping Report confirms that the ES would include an outline of the key decommissioning activities.

The Secretary of State's Comments

Description of the application site and surrounding area

- 2.43 The Secretary of State is pleased to note the applicant's intention to include in the ES a section that summarises the site and surroundings which would identify the context of the proposed

development, any relevant designations and sensitive receptors. The intention to identify land that could be directly or indirectly affected by the proposed development and any associated auxiliary facilities, landscaping areas and potential off site mitigation or compensation schemes is noted.

- 2.44 The description of the application site and the surrounding area provided in the Scoping Report predominantly relates to the power station site. Only a limited description of the connection corridors has been provided. The Secretary of State would expect the ES to include a detailed description of the whole site boundary and surrounding area accompanied by figures which illustrate the full extent of the DCO boundary. When describing the distance and location of receptors relative to the development site, the ES should be clear in referencing which component/location in the site boundary the distance/direction provided relates to.
- 2.45 The ES should clarify the site area of the proposed development including the associated works.

Description of the proposed development

- 2.46 The applicant should ensure that the description of the proposed development that is being applied for is as accurate and firm as possible as this will form the basis of the environmental impact assessment. It is understood that at this stage in the evolution of the scheme the description of the proposal, in particular the water, gas and electricity connection routes are not confirmed. The applicant should be aware however, that the description of the development in the ES must be sufficiently certain to meet the requirements of paragraph 17 of Schedule 4 Part 1 of the EIA Regulations and there should therefore be more certainty by the time the ES is submitted with the DCO.
- 2.47 The Scoping Report does not provide a clear summary of the key components of the development; and whether these are integral works or associated development. The Secretary of State would expect to see a defined list of the temporary and permanent development components in the ES.
- 2.48 If a draft DCO is to be submitted, the applicant should clearly define what elements of the proposed development are integral to the NSIP and which is 'associated development' under the Planning Act 2008 (PA 2008) or is an ancillary matter. The description of the development provided in the ES should match the schedule of works sought in the draft DCO.
- 2.49 Any proposed works and/or infrastructure required as associated development, or as an ancillary matter, (whether on or off-site) should be considered as part of an integrated approach to environmental assessment.

- 2.50 The Secretary of State recommends that the ES should include a clear description of all aspects of the proposed development, at the construction, operation and decommissioning stages, and include:
- land use requirements, including the area of the works in the River Severn
 - site preparation (e.g. ground level raising, remediation works)
 - construction processes and methods
 - materials/resource requirements
 - lighting requirements
 - boundary treatments and landscaping
 - transport routes
 - operational requirements including the main characteristics of the production process and the nature and quantity of materials used, as well as waste arisings and their disposal
 - maintenance activities including any potential environmental or navigation impacts; and
 - anticipated emissions: water, air and soil pollution, noise, vibration, light, heat, radiation (quantified where appropriate).
- 2.51 All waste types arising from the development should be quantified and classified. The ES will need to identify and describe the control processes and mitigation procedures for storing and transporting waste off site.

Alternatives

- 2.52 The Secretary of State notes that the applicant intends to provide an assessment of alternatives in Chapter 6 of the ES (Design Evolution and Alternatives Assessment).
- 2.53 In addition to the alternatives listed in paragraph 4.1 of the ES, consideration should also be given to construction alternatives such as construction methods and material transportation options and routing.
- 2.54 It is noted that the applicant does not intend to assess the 'Do-nothing' alternative. The applicant should provide a justification for this in the ES.
- 2.55 The applicant may find it helpful to use illustrations to demonstrate the design evolution of the development.

Flexibility

- 2.56 The Secretary of State notes from the project description provided in Chapter 3 of the Scoping Report that the detailed design of the power station is still being developed and that the draft description of development contains a number of variables (technology choice, power station design, connection options for water, gas and electricity). The Secretary of State welcomes that the proposals are to be firmed up during the pre-application stages but encourages the description to be as accurate and firm as possible so that its environmental impact can be more accurately assessed.
- 2.57 Where the details of the scheme cannot be defined precisely for the EIA, the applicant must ensure to assess the likely worst case scenario. The applicant's attention is drawn to Advice Note 9 'Using the 'Rochdale Envelope' which is available on the Planning Inspectorate's website and to the 'Flexibility' section in Appendix 3 of this Opinion which provides additional details on the recommended approach.
- 2.58 The applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the scheme have yet to be finalised and provide the reasons. At the time of application, any proposed scheme parameters should not be so wide ranging as to represent effectively different schemes. The scheme parameters will need to be clearly defined in the draft DCO and therefore in the accompanying ES. It is a matter for the applicant, in preparing an ES, to consider whether it is possible to robustly assess a range of impacts resulting from a large number of undecided parameters. The description of the proposed development in the ES must not be so wide that it is insufficiently certain to comply with requirements of paragraph 17 of Schedule 4 Part 1 of the EIA Regulations.
- 2.59 It should be noted that if the proposed development changes substantially during the EIA process, prior to application submission, the applicant may wish to consider the need to request a new scoping opinion.

Proposed access

- 2.60 Whilst the project description in Chapter 3 of the Scoping Report confirms that the power station site would be accessed from two points on Central Avenue to the north of the site, additional information is provided on a potential access point to the south of the site as a result of a proposed extension to an approved new link road. If the applicant intends to consider this as a viable access point, a description of this route and an assessment of this option should be provided in the ES. The ES should also identify the access points for the associated connection works.

- 2.61 A description of the proposed routing for traffic to the proposed power station site and the connection routes during the construction and operation of the development should be provided in the ES. This should be accompanied by figures to illustrate the anticipated routes on the local road/rail network.
- 2.62 Any requirement for abnormal load movements should be described and quantified in the ES.
- 2.63 The applicant would need to demonstrate that sufficient parking would be provided on the power station site and along the connection routes (as relevant) during the construction, operation and decommissioning of the development.
- 2.64 If the option to transport material by rail is chosen, the ES must provide a detailed description of the access arrangements via rail including information on the anticipated movements.
- 2.65 The Scoping Report does not clarify how access to the outfall pipe in the Severn Estuary would be gained if included in the DCO application and determined that repairs to this would be required. This information should be provided in the ES if applicable.

Construction

- 2.66 The Secretary of State notes the intention to provide a detailed description of the proposed construction programme, activities/methods, site preparation works and anticipated vehicle movements in the ES.
- 2.67 The ES should provide information on the nature and quantities and sourcing of materials required to construct the development.
- 2.68 The Scoping Report clarifies the location of the construction compound for the power station site, but no confirmation of the temporary construction land take for the connection routes is provided. It is anticipated that more information on this will be available once the potential options have been refined.
- 2.69 The ES should describe the number of workers required during the construction of the development, if they are full/part time, and whether any shift work would be required. A description of the construction working hours should be provided in the ES and confirmation as to whether any overnight working would be required.

Operation and maintenance

- 2.70 The anticipated maintenance requirements of the development should be described in the ES. This should include information on

the timings of any anticipated works to replace or upgrade any components of the development.

- 2.71 The ES should describe the anticipated vehicle movements associated with the operation of the development, including staff vehicles and HGV movements.

Decommissioning

- 2.72 The Secretary of State is pleased to note that a description of the anticipated decommissioning activities will be provided in the ES and the assessment of decommissioning impacts will be based on these activities
- 2.73 The applicant is advised to consider whether a requirement should be placed in the DCO to secure a site closure and restoration plan including prior approval with relevant bodies on the proposed approach to decommissioning and restoration of the site.

3.0 EIA APPROACH AND TOPIC AREAS

Introduction

- 3.1 This section contains the Secretary of State's specific comments on the approach to the ES and topic areas as set out in the Scoping Report. General advice on the presentation of an ES is provided at Appendix 3 of this Opinion and should be read in conjunction with this Section.
- 3.2 Applicants are advised that the scope of the DCO application should be clearly addressed and assessed consistently within the ES.

Environmental Statement (ES) - approach

- 3.3 The information provided in the Scoping Report sets out the proposed approach to the preparation of the ES. Whilst early engagement on the scope of the ES is to be welcomed, the Secretary of State notes that the level of information provided at this stage is not always sufficient to allow for detailed comments from either the Secretary of State or the consultees.
- 3.4 The Secretary of State would suggest that the applicant ensures that appropriate consultation is undertaken with the relevant consultees in order to agree wherever possible the timing and relevance of survey work as well as the methodologies to be used. The Secretary of State notes and welcomes the intention to finalise the scope of investigations in conjunction with on-going stakeholder liaison and consultation with the relevant regulatory authorities and their advisors.
- 3.5 The Secretary of State recommends that the physical scope of the study areas should be identified under all the environmental topics and should be sufficiently robust in order to undertake the assessment. The extent of the study areas should be on the basis of recognised professional guidance, whenever such guidance is available. The study areas should also be agreed with the relevant consultees and, where this is not possible, this should be stated clearly in the ES and a reasoned justification given. The scope should also cover the breadth of the topic area and the temporal scope, and these aspects should be described and justified.

Matters to be scoped out

- 3.6 In Chapter 7 of the Scoping Report the applicant has identified the matters proposed to be 'scoped out'. These include:
 - waste

- electronic Interference
 - aviation; and
 - accidental events.
- 3.7 In addition to the topics described in Chapter 7 of the Scoping Report, it is noted that the applicant also intends to scope the following aspects out of the ES:
- Operational traffic
- 3.8 The Secretary of State considers that insufficient information has been provided to support the proposed approach, including for example any evidence demonstrating agreement with key consultees. Consequently the Secretary of State does not agree to scope these topics out of the assessment.
- 3.9 In order to demonstrate that topics have not simply been overlooked, where topics are scoped out prior to submission of the DCO application, the ES should still explain the reasoning and justify the approach taken.

National Policy Statements (NPSs)

- 3.10 Sector specific NPSs are produced by the relevant Government Departments and set out national policy for nationally significant infrastructure projects (NSIPs). They provide the framework within which the Examining Authority will make their recommendations to the Secretary of State and include the Government's objectives for the development of NSIPs.
- 3.11 The relevant NPSs for the proposed development are:
- Overarching National Policy Statement for Energy: EN-1
 - National Policy Statement for Fossil Fuel Generating Infrastructure: EN-2
 - National Policy Statement for Gas Supply Infrastructure and Gas and Oil Pipelines: EN-4
 - National Policy Statement for Electricity Networks Infrastructure: EN-5
- 3.12 The relevant NPSs for the proposed development set out both the generic and technology-specific impacts that should be considered in the EIA for the proposed development. When undertaking the EIA, the applicant must have regard to both the generic and technology-specific impacts and identify how these impacts have been assessed in the ES.

3.13 The Secretary of State must have regard to any matter that the Secretary of State thinks is important and relevant to the Secretary of State's decision.

Environmental Statement - Structure

3.14 Paragraph 8.9 of the Scoping Report sets out the proposed Contents list of the ES on which the applicant seeks the opinion of the Secretary of State. Volume I would contain the Main Report and the following Chapters are proposed:

- Chapter 1: Introduction
- Chapter 2: Assessment Methodology
- Chapter 3: Description of the Site
- Chapter 4: The Proposed Development
- Chapter 5: Construction Works
- Chapter 6: Design Evolution and Alternatives Assessment
- Chapter 7: Planning Policy Context
- Chapter 8: Air Quality
- Chapter 9: Noise and Vibration
- Chapter 10: Ecology and Habitats
- Chapter 11: Flood Risk, Hydrology and Water Resources
- Chapter 12: Geology, Hydrogeology and Land Contamination
- Chapter 13: Archaeology and Cultural Heritage
- Chapter 14: Traffic and Transportation
- Chapter 15: Land Use, Recreation and Socio-economics
- Chapter 16: Landscape and Visual Impacts
- Chapter 17: Sustainability and Climate Change
- Chapter 18: Health Impact Assessment
- Chapter 19: Cumulative Effects
- Chapter 20: Residual Impacts

3.15 Figures would be provided in Volume II, Technical Appendices in Volume III and a Non-Technical Summary (NTS) would be provided separately.

Topic Areas (see Scoping Report Section 6)

Air Quality and Dust

3.16 The Secretary of State notes the intention to use a number of existing data sources available to assist in establishing the

baseline air quality conditions of the site. The applicant must ensure that data used to inform the assessment is up to date and representative of the existing conditions on the site and surrounding area.

- 3.17 It is noted that the need for any targeted baseline monitoring, such as NO₂ diffusion tube monitoring will be determined in consultation with the relevant consultees.
- 3.18 The Secretary of State notes the intention to conduct air dispersion modelling for the CCGT stacks and the fast response generator stacks in accordance with a methodology to be agreed with the relevant consultees. The Secretary of State agrees that a worst case scenario based on the development requested in the DCO and assuming the power station is at full operating load should be modelled. The Secretary of State also acknowledges that lower operational loads may be modelled to demonstrate differing scenarios. A clear explanation of how cumulative developments have been included in the modelling should be provided.
- 3.19 Any guidance used to inform the assessment should be clearly justified in the ES and agreed with the relevant consultees. The Secretary of State would expect to see evidence of all agreements reached with consultees regarding the scope of the assessment to be provided in the ES.
- 3.20 The Secretary of State notes from paragraph 6.11 of the ES that impacts on internationally and nationally designated ecological receptors will be considered as part of the assessment.
- 3.21 Air quality and dust levels should be considered not only on site but also off site, including along access roads, local footpaths and other PROW.
- 3.22 Where mitigation measures are recommended for the control of dust, the ES should clearly identify how the mitigation measures would be secured in the DCO. Consideration should be given to appropriate mitigation measures and to monitoring dust complaints.
- 3.23 It is noted that the applicant intends to produce their own quantitative significance criteria using professional judgement and based on guidance listed in paragraph 6.17 of the Scoping Report. The Secretary of State expects that the proposed approach would be agreed with the relevant consultees.

Noise and Vibration

- 3.24 The Secretary of State is pleased to note that the location of baseline noise monitoring and the monitoring regime will be

agreed with Environmental Health Officers of both South Gloucestershire Council and Bristol City Council.

- 3.25 In respect to paragraph 6.22 of the Scoping Report, if the applicant is able to provide sufficient evidence to demonstrate that operational vibration impacts will not be significant and provide evidence of the agreement on this with the relevant consultees, the applicant may wish to scope this out of the EIA.
- 3.26 Modelling software used should be agreed with the relevant consultees.
- 3.27 The Secretary of State is pleased to note that the effects on local ecological receptors, in particular birds, on the site and surrounding area including the affected traffic routes will be considered and the study area and receptors agreed with Natural England.
- 3.28 It is noted that an underwater noise assessment will only be required if the final design includes works to the outfall pipe in the Severn Estuary.
- 3.29 Consideration should be given to monitoring noise complaints during construction and when the development is operational.

Ecology

- 3.30 The Secretary of State notes that a number of terrestrial ecological surveys have been proposed as listed in paragraph 6.46 of the Scoping Report. The applicant is advised to agree the scope of the surveys with Natural England.
- 3.31 It is noted that the potential requirement for marine ecology surveys will be agreed once it is known whether works to the outfall pipe in the Severn Estuary would be required.
- 3.32 The Secretary of State is pleased to note that the assessment will consider the interrelationships with noise and vibration, air quality and water quality impacts.
- 3.33 The Secretary of State notes the possible need for an Appropriate Assessment in view of the development site's location in relation to European Sites in the Severn Estuary (see Section 4 of this Opinion).

Flood Risk, Hydrology and Water Resources

- 3.34 The Secretary of State notes that a desk based assessment will be conducted to confirm the potential surface water and groundwater receptors.

- 3.35 The Secretary of State welcomes the provision of a Flood Risk Assessment (FRA) as part of the DCO application, and notes that the methodology adopted will be agreed with the EA and the relevant IDBs. It is noted that fluvial and tidal flooding will be considered.
- 3.36 The Secretary of State considers that the impacts of climate change, in terms of increased run-off and rises in sea level should be taken into account in the ES.
- 3.37 Mitigation measures should be addressed and the Secretary of State advises that reference should be made to other regimes (such as pollution prevention from the EA). On-going monitoring should also be addressed and agreed with the relevant authorities to ensure that any mitigation measures are effective.
- 3.38 The Secretary of State recommends that the sections considering the water environment should be cross referenced.

Geology, Hydrogeology and Land Contamination

- 3.39 The extent of the study area for the assessment is not described in the Scoping Report. The Secretary of State recommends that this should be agreed with relevant consultees and justified in the ES to ensure potential impacts are identified and assessed.
- 3.40 The Secretary of State notes that the extent of the contamination on the site will be established using existing data sources and information from previous surveys conducted on the site. The Secretary of State agrees that the need for any intrusive investigation works should be discussed with the relevant consultees.
- 3.41 It is noted that an assessment of impact on marine soils and sediment transport will be conducted once it is known whether works will be required in the Severn Estuary in relation to the outfall pipe.
- 3.42 The Secretary of State notes that the need for any mitigation measures will be discussed with the relevant consultees once the results of the investigation works are available.

Archaeology and Cultural Heritage

- 3.43 The extent of the study area should be agreed in consultation with the relevant consultees.
- 3.44 The Secretary of State is pleased to note that the potential impacts on the setting of heritage assets will be informed by establishing the Zone of Theoretical Visibility (ZTV).

- 3.45 It is noted that the need for any intrusive archaeological investigation works will be agreed in consultation with the relevant consultees.
- 3.46 Cross reference should be made to the Landscape and Visual section of the ES.

Traffic and Transport

- 3.47 The Secretary of State welcomes the development of the assessment of transport impacts in association with the local highways authorities and the Highways Agency (HA). The Secretary of State would expect on-going discussions and agreement, where possible, with such bodies on the scope of the standalone Transport Assessment (TA) and the assessment provided in the ES.
- 3.48 The need for the consideration of marine transport impacts should be determined once it is known whether any works would be carried out in the Severn Estuary.
- 3.49 The Secretary of State notes that the need for any traffic surveys to supplement existing data sources will be agreed in consultation with the relevant bodies.
- 3.50 Mitigation measures should be considered such as a travel plan and sourcing materials so as to minimise transport impacts.
- 3.51 The applicant's attention is drawn to the responses from the Highways Agency and Trinity House (Scoping Opinion Appendix 2) in relation to the assessment of traffic and transport impacts.

Land Use, Recreation and Socio-economics

- 3.52 The Secretary of State is pleased to note that a detailed assessment of direct and indirect effects on employment during the construction, operation and decommissioning of the development.
- 3.53 In addition to the proposed scope of the assessment listed in paragraph 6.101 of the ES, the applicant should consider the potential impacts on the utilities infrastructure.
- 3.54 Any guidance used to inform the assessment should be outlined in the ES.

Landscape and Visual

- 3.55 The Secretary of State notes that the ES would provide a clear distinction between the assessment of impacts on landscape character and visual impacts. The Secretary of State welcomes the

intention to conduct landscape and visual impact assessments in line with the guidance referred to in paragraph 6.112 of the Scoping Report.

- 3.56 The study area adopted for the purposes of the assessment should be agreed with the relevant local authorities.
- 3.57 The landscape and visual assessment in the scoping report refers to the Zone of Theoretical Visibility (ZTV). The Secretary of State advises that the ES should describe the methodology and models used and provide information on the area covered and the timing of any survey work. The Secretary of State recommends that the location of viewpoints should be agreed with the local authorities.
- 3.58 The proposals will be for large structures. The Secretary of State requests that careful consideration should be given to the form, siting, and use of materials and colours in terms of minimising the adverse visual impact of these structures. Views from across the Estuary should be included as well as night time views.
- 3.59 The Secretary of State notes that a landscaping strategy would be development to mitigate the landscape and visual impacts of the development. The applicant should consider providing a draft landscaping strategy with the application and secure this via a requirement in the DCO.

Sustainability and Climate Change

- 3.60 The Secretary of State welcomes the Applicant's intention to incorporate an assessment of the design against established sustainability criteria.
- 3.61 The Secretary of State welcomes the proposal to undertake an investigation into potential combined heat and power (CHP) users in the vicinity of the Site. Impacts arising as a result of additional infrastructure required to provide CHP to nearby sites should be considered within the ES.

Health Impact Assessment

- 3.62 The applicant's attention is drawn to the comments in Section 4 of this Opinion in relation to the need for a Health Impact Assessment.

Cumulative Effects

- 3.63 The applicant's attention is drawn to Appendix 3 of this Opinion in relation to the assessment of cumulative effects. The ES should show clearly the scope of the assessment, and the Secretary of State advises that this is agreed with consultees. The ES should explain the approach taken in the assessment, and how its

conclusions have been reached. The applicant is encouraged to seek as much information on other projects within the study area applied, and is directed to the National Infrastructure Planning website for information on other NSIPs, including the proposed Hinkley Point C Connection.

Residual Effects

- 3.64 The Secretary of State notes the intention to include the topic of residual effects as a separate chapter in the ES, and encourages the applicant to ensure that residual effects are clearly explained in the context of the mitigation proposed, for each effect. Appendix 3 of this Opinion provides further comment on how mitigation measures should be described and their effectiveness evaluated within the ES.

4.0 OTHER INFORMATION

- 4.1 This section does not form part of the Secretary of State's Opinion as to the information to be provided in the environmental statement. However, it does respond to other issues that the Secretary of State has identified which may help to inform the preparation of the application for the DCO.

Pre-application Prospectus

- 4.2 The Planning Inspectorate offers a service for applicants at the pre-application stage of the nationally significant infrastructure planning process. Details are set out in the prospectus 'Pre-application service for NSIPs'. The prospectus explains what the Planning Inspectorate can offer during the pre-application phase and what is expected in return. The Planning Inspectorate can provide advice about the merits of a scheme in respect of national policy; can review certain draft documents; as well as advice about procedural and other planning matters. Where necessary a facilitation role can be provided. The service is optional and free of charge.
- 4.3 The prospectus is available on the planning portal website: http://infrastructure.planningportal.gov.uk/wp-content/uploads/2014/05/NSIP-prospectus_May2014.pdf
- 4.4 The level of pre-application support provided by the Planning Inspectorate will be agreed between an applicant and the Inspectorate at the beginning of the pre-application stage and will be kept under review.

Habitats Regulations Assessment (HRA)

- 4.5 The Secretary of State notes Section 6.52 of the applicant's Scoping Report which refers to the need for an HRA Screening assessment with respect to the Severn Estuary, located close to the proposed development, which is protected as an SAC, SPA, and Ramsar site. It is the applicant's responsibility to provide sufficient information to the Competent Authority (CA) to enable them to carry out a HRA if required. The applicant should note that the CA is the Secretary of State.
- 4.6 The applicant's attention is drawn to The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended) (The APFP Regulations) and the need to include information identifying European sites to which the Habitats Regulations applies or any Ramsar site or potential SPA which may be affected by a proposal. The submitted information should be sufficient for the competent authority to make an appropriate

assessment (AA) of the implications for the site if required by Regulation 61(1) of the Habitats Regulations.

- 4.7 The report to be submitted under Regulation 5(2)(g) of the APFP Regulations with the application must deal with two issues: the first is to enable a formal assessment by the CA of whether there is a likely significant effect; and the second, should it be required, is to enable the carrying out of an AA by the CA.
- 4.8 When considering aspects of the environment likely to be affected by the proposed development; including flora, fauna, soil, water, air and the inter-relationship between these, consideration should be given to the designated sites in the vicinity of the proposed development.
- 4.9 The Secretary of State recommends that early agreement on the approach, with the relevant Statutory Nature Conservation Bodies (SNCBs) is sought, and that there is evidence of this agreement as part of the DCO application.
- 4.10 Further information with regard to the HRA process is contained within Planning Inspectorate's Advice Note 10 available on the National Infrastructure pages on the Planning Portal website.

Evidence Plans

- 4.11 An evidence plan is a formal mechanism to agree upfront what information the applicant needs to supply to the Planning Inspectorate as part of a DCO application. An evidence plan will help to ensure compliance with the Habitats Regulations. It will be particularly relevant to NSIPs where impacts may be complex, large amounts of evidence may be needed or there are a number of uncertainties. It will also help applicants meet the requirement to provide sufficient information (as explained in Advice Note 10) in their application, so the Examining Authority can recommend to the Secretary of State whether or not to accept the application for examination and whether an appropriate assessment is required.
- 4.12 Any applicant of a proposed NSIP in England, or England and Wales, can request an evidence plan. A request for an evidence plan should be made at the start of pre-application (eg after notifying the Planning Inspectorate on an informal basis) by contacting the Major Infrastructure and Environment Unit (MIEU) in Defra (MIEU@defra.gsi.gov.uk).

Sites of Special Scientific Interest (SSSIs)

- 4.13 The Secretary of State notes that the Severn Estuary SSSI is located close to the proposed development. Where there may be potential impacts on the SSSIs, the Secretary of State has duties under sections 28(G) and 28(I) of the Wildlife and Countryside Act

1981 (as amended) (the W&C Act). These are set out below for information.

- 4.14 Under s28(G), the Secretary of State has a general duty '... to take reasonable steps, consistent with the proper exercise of the authority's functions, to further the conservation and enhancement of the flora, fauna or geological or physiographical features by reason of which the site is of special scientific interest'.
- 4.15 Under s28(I), the Secretary of State must notify the relevant nature conservation body (NCB), NE in this case, before authorising the carrying out of operations likely to damage the special interest features of a SSSI. Under these circumstances 28 days must elapse before deciding whether to grant consent, and the Secretary of State must take account of any advice received from the NCB, including advice on attaching conditions to the consent. The NCB will be notified during the examination period.
- 4.16 If applicants consider it likely that notification may be necessary under s28(I), they are advised to resolve any issues with the NCB before the DCO application is submitted to the Secretary of State. If, following assessment by applicants, it is considered that operations affecting the SSSI will not lead to damage of the special interest features, applicants should make this clear in the ES. The application documents submitted in accordance with Regulation 5(2)(I) could also provide this information. Applicants should seek to agree with the NCB the DCO requirements which will provide protection for the SSSI before the DCO application is submitted.

European Protected Species (EPS)

- 4.17 Applicants should be aware that the decision maker under PA 2008 has, as the CA, a duty to engage with the Habitats Directive. Where a potential risk to an EPS is identified, and before making a decision to grant development consent, the CA must, amongst other things, address the derogation tests in Regulation 53 of the Habitats Regulations. Therefore the applicant may wish to provide information which will assist the decision maker to meet this duty.
- 4.18 If an applicant has concluded that an EPS licence is required the ExA will need to understand whether there is any impediment to the licence being granted. The decision to apply for a licence or not will rest with the applicant as the person responsible for commissioning the proposed activity by taking into account the advice of their consultant ecologist.
- 4.19 Applicants are encouraged to consult with NE and, where required, to agree appropriate requirements to secure necessary mitigation. It would assist the examination if applicants could provide, with the application documents, confirmation from NE whether any

issues have been identified which would prevent the EPS licence being granted.

- 4.20 Generally, NE are unable to grant an EPS licence in respect of any development until all the necessary consents required have been secured in order to proceed. For NSIPs, NE will assess a draft licence application in order to ensure that all the relevant issues have been addressed. Within 30 working days of receipt, NE will either issue 'a letter of no impediment' stating that it is satisfied, insofar as it can make a judgement, that the proposals presented comply with the regulations or will issue a letter outlining why NE consider the proposals do not meet licensing requirements and what further information is required before a 'letter of no impediment' can be issued. The applicant is responsible for ensure draft licence applications are satisfactory for the purposes of informing formal pre-application assessment by NE.
- 4.21 Ecological conditions on the site may change over time. It will be the applicant's responsibility to ensure information is satisfactory for the purposes of informing the assessment of no detriment to the maintenance of favourable conservation status (FCS) of the population of EPS affected by the proposals . Applicants are advised that current conservation status of populations may or may not be favourable. Demonstration of no detriment to favourable populations may require further survey and/or submission of revised short or long term mitigation or compensation proposals. In England the focus concerns the provision of up to date survey information which is then made available to NE (along with any resulting amendments to the draft licence application). This approach will help to ensure no delay in issuing the licence should the DCO application be successful. Applicants with projects in England or English waters can find further information on Natural England's protected species licensing procedures by clicking on the following link: http://webarchive.nationalarchives.gov.uk/20140605090108/http://www.naturalengland.org.uk/Images/wml-g36_tcm6-28566.pdf
- 4.22 In England or English Waters, assistance may be obtained from the Consents Service Unit. (Please see below for more information on the work of the Unit).

Consents Service Unit

- 4.23 The Unit works with applicants on a number of key non-planning consents associated with nationally significant infrastructure projects in England and English Waters. The Unit's remit includes 12 non-planning consents, including European Protected Species (EPS) licences, environmental permits and flood defence consents. The consents covered are set out in Annex 1 of the Unit's 'Prospectus for Developers' available on the web. The service is

free of charge and entirely voluntary. Further information is available from the following link:

- 4.24 <http://infrastructure.planningportal.gov.uk/legislation-and-advice/consents-service-unit/>

Other regulatory regimes

- 4.25 The Secretary of State recommends that the applicant should state clearly what regulatory areas are addressed in the ES and that the applicant should ensure that all relevant authorisations, licences, permits and consents that are necessary to enable operations to proceed are described in the ES. Also it should be clear that any likely significant effects of the proposed development which may be regulated by other statutory regimes have been properly taken into account in the ES.
- 4.26 It will not necessarily follow that the granting of consent under one regime will ensure consent under another regime. For those consents not capable of being included in an application for consent under the PA 2008, the Secretary of State will require a level of assurance or comfort from the relevant regulatory authorities that the proposal is acceptable and likely to be approved, before they make a recommendation or decision on an application. The applicant is encouraged to make early contact with other regulators. Information from the applicant about progress in obtaining other permits, licences or consents, including any confirmation that there is no obvious reason why these will not subsequently be granted, will be helpful in supporting an application for development consent to the Secretary of State.

The Environmental Permit

- 4.27 The Environmental Permitting Regulations 2010 (EPR 10) require operators of certain facilities, which could harm the environment or human health, to obtain permits from the Environment Agency. Environmental permits can combine several activities into one permit. There are standard permits supported by 'rules' for straightforward situations and bespoke permits for complex situations. For further information, please [click here](#).
- 4.28 The Environment Agency's environmental permits cover:
- industry regulation
 - waste management (waste treatment, recovery or disposal operations)
 - discharges to surface water
 - groundwater activities, and
 - radioactive substances activities.
- 4.29 Characteristics of environmental permits include:

- they are granted to operators (not to land)
 - they can be revoked or varied by the Environment Agency
 - operators are subject to tests of competence
 - operators may apply to transfer environmental permits to another operator subject to a test of competence
 - conditions may be attached.
- 4.30 It is the responsibility of applicants to identify whether an environmental permit is required before an NSIP can be constructed or operated. Failure to obtain an environmental permit is an offence. The Consents Service Unit was established to aid applicants with this.
- 4.31 The Environment Agency allocates a limited amount of permitting pre-application advice free of charge. Further advice can be provided, but this will be subject to cost recovery.
- 4.32 The Environment Agency encourages applicants to engage with them early in relation to the requirements of the Environmental Permitting process. Where a project is complex or novel, or requires a Habitats Risk Assessment, applicants are encouraged to "parallel track" their environmental permit applications to the Environment Agency with their DCO applications to the Planning Inspectorate.
- 4.33 When considering the timetable to submit their environmental permit application, applicants should bear in mind that the Environment Agency will not be in a position to provide a detailed view on the permit application until it issues its draft decision for public consultation (for sites of high public interest) or its final decision. Therefore the applicant should ideally submit its environmental permit application sufficiently early so that the Environment Agency is at this point in the determination by the time the Development Consent Order reaches examination.
- 4.34 It is also in the interests of an applicant to ensure that any specific requirements arising from permitting are capable of being carried out under the works permitted by the DCO. Otherwise there is a risk that requirements under permitting could conflict with the works which have been authorised by the DCO (e.g. a stack of greater height than that authorised by the DCO could be required) and render the DCO impossible to implement.

Health Impact Assessment

- 4.35 The Scoping Report confirms that the applicant does not intend to submit a standalone Health Impact Assessment. However, a Health Impact Assessment chapter will be provided in the ES and it is proposed that this chapter will provide a summary of information provided within other technical chapters for the purposes of ensuring health related information is accessible in

one location. The Secretary of State advises that the applicant should have regard to the responses received from the relevant consultees regarding health, and in particular to the comments from the Health and Safety Executive and/or Public Health England.

Transboundary Impacts

- 4.36 The Secretary of State has noted that the applicant **has not** indicated whether the proposed development is likely to have significant impacts on another European Economic Area (EEA) State.
- 4.37 Regulation 24 of the EIA Regulations, which *inter alia* require the Secretary of State to publicise a DCO application if the Secretary of State is of the view that the proposal is likely to have significant effects on the environment of another EEA state and where relevant to consult with the EEA state affected. The Secretary of State considers that where Regulation 24 applies, this is likely to have implications for the examination of a DCO application.
- 4.38 The Secretary of State recommends that the ES should identify whether the proposed development has the potential for significant transboundary impacts and if so, what these are and which EEA States would be affected.

Other regulatory regimes

- 4.39 The Secretary of State recommends that the applicant should state clearly what regulatory areas are addressed in the ES and that the applicant should ensure that all relevant authorisations, licences, permits and consents that are necessary to enable operations to proceed are described in the ES. Also it should be clear that any likely significant effects of the proposed development which may be regulated by other statutory regimes have been properly taken into account in the ES.
- 4.40 It will not necessarily follow that the granting of consent under one regime will ensure consent under another regime. For those consents not capable of being included in an application for consent under the PA 2008, the Secretary of State will require a level of assurance or comfort from the relevant regulatory authorities that the proposal is acceptable and likely to be approved, before they make a recommendation or decision on an application. The applicant is encouraged to make early contact with other regulators. Information from the applicant about progress in obtaining other permits, licences or consents, including any confirmation that there is no obvious reason why these will not subsequently be granted, will be helpful in supporting an application for development consent to the Secretary of State.

APPENDIX 1
List of Consultees

APPENDIX 1

LIST OF BODIES FORMALLY CONSULTED DURING THE SCOPING EXERCISE

CONSULTEE	ORGANISATION
SCHEDULE 1	
The Health and Safety Executive	Health and Safety Executive
The National Health Service Commissioning Board	NHS England
The relevant Clinical Commissioning Group	South Gloucestershire Clinical Commissioning Group
The relevant Clinical Commissioning Group	Bristol Clinical Commissioning Group
Natural England	Natural England
The Historic Buildings and Monuments Commission for England	English Heritage - South West
The Relevant Fire and Rescue Authority	Avon Fire & Rescue Service
The Relevant Police and Crime Commissioner	Avon and Somerset Police and Crime Commissioner
The Relevant Parish Council(s) or Relevant Community Council	Aust Parish Council
The Relevant Parish Council(s) or Relevant Community Council	Olveston Parish Council
The Relevant Parish Council(s) or Relevant Community Council	Pilning and Severn Beach Parish Council
The Relevant Parish Council(s) or Relevant Community Council	Almondsbury Parish Council
The Environment Agency	The Environment Agency - South West Region
The relevant AONB Conservation Boards	Cotswolds Conservation Board
The Joint Nature Conservation Committee	Joint Nature Conservation Committee
The Maritime and Coastguard Agency	Maritime & Coastguard Agency
The Maritime and Coastguard Agency - Regional Office	The Maritime and Coastguard Agency - Swansea Maritime Rescue Co-ordination Centre
The Marine Management Organisation	Marine Management Organisation (MMO)
The Civil Aviation Authority	Civil Aviation Authority
The Highways Agency	The Highways Agency - South West
The Relevant Highways Authority	Bristol City Council Highways

The Relevant Highways Authority	South Gloucestershire Council Highways
The Relevant Internal Drainage Board	Lower Severn Internal Drainage Board
The Canal and River Trust	The Canal and River Trust
Trinity House	Trinity House
Public Health England, an executive agency to the Department of Health	Public Health England
The Crown Estate Commissioners	The Crown Estate
The Forestry Commission	Forestry Commission - South West Area
The Secretary of State for Defence	Ministry of Defence
RELEVANT STATUTORY UNDERTAKERS	
Health Bodies (s.16 of the Acquisition of Land Act (ALA) 1981)	
The National Health Service Commissioning Board	NHS England
The relevant Clinical Commissioning Group	South Gloucestershire Clinical Commissioning Group
The relevant Clinical Commissioning Group	Bristol Clinical Commissioning Group
Local Area Team	Bristol, North Somerset, Somerset and South Gloucestershire Area team
Ambulance Trusts	South Western Ambulance Service NHS Foundation Trust
Relevant Statutory Undertakers (s.8 ALA 1981)	
Railways	Network Rail Infrastructure Ltd
Railways	Highways Agency Historical Railways Estate
Road Transport	Severn River Crossings plc
Canal Or Inland Navigation Authorities	Bristol Avon Navigation
Dock	The Bristol Port Company
Lighthouse	Trinity House
Civil Aviation Authority	Civil Aviation Authority
Licence Holder (Chapter 1 Of Part 1 Of Transport Act 2000)	NATS En-Route Safeguarding
Universal Service Provider	Royal Mail Group
Relevant Homes and Communities Agency	Homes and Communities Agency
Relevant Environment Agency	Environment Agency
Water and Sewage Undertakers	Bristol Water
Water and Sewage Undertakers	Wessex Water
Public Gas Transporter	Energetics Gas Limited
Public Gas Transporter	ES Pipelines Ltd
Public Gas Transporter	ESP Connections Ltd
Public Gas Transporter	ESP Networks Ltd

Public Gas Transporter	ESP Pipelines Ltd
Public Gas Transporter	Fulcrum Pipelines Limited
Public Gas Transporter	GTC Pipelines Limited
Public Gas Transporter	Independent Pipelines Limited
Public Gas Transporter	LNG Portable Pipeline Services Limited
Public Gas Transporter	National Grid Gas Plc
Public Gas Transporter	National Grid Plc
Public Gas Transporter	Quadrant Pipelines Limited
Public Gas Transporter	SSE Pipelines Ltd
Public Gas Transporter	Scotland Gas Networks Plc
Public Gas Transporter	Southern Gas Networks Plc
Public Gas Transporter	Wales and West Utilities Ltd
Electricity Generators With CPO Powers	Seabank Power Limited
Electricity Distributors With CPO Powers	Energetics Electricity Limited
Electricity Distributors With CPO Powers	ESP Electricity Limited
Electricity Distributors With CPO Powers	Independent Power Networks Limited
Electricity Distributors With CPO Powers	The Electricity Network Company Limited
Electricity Distributors With CPO Powers	Utility Assets Limited
Electricity Distributors With CPO Powers	Western Power Distribution (South West) Plc
Electricity Transmitters With CPO Powers	National Grid Electricity Transmission Plc
Electricity Transmitters With CPO Powers	National Grid Plc
LOCAL AUTHORITIES (SECTION 43)	
Marine Management Organisation	Marine Management Organisation (MMO)
Local Authority	South Gloucestershire Council
Local Authority	Bristol City Council
Local Authority	Monmouthshire Council
Local Authority	Cardiff Council
Local Authority	Forest of Dean District Council
Local Authority	Stroud District Council
Local Authority	Cotswold District Council
Local Authority	Gloucestershire County Council
Local Authority	Wiltshire Council
Local Authority	Bath and North East Somerset Council
Local Authority	North Somerset Council

NON-PRESCRIBED CONSULTATION BODIES	
Royal National Lifeboat Institution	Royal National Lifeboat Institution
Local Authority	Newport City Council

APPENDIX 2

Respondents to Consultation and Copies of Replies

APPENDIX 2

LIST OF BODIES WHO REPLIED BY THE STATUTORY DEADLINE

Bath and North East Somerset Council
Cardiff City Council
Civil Aviation Authority
Environment Agency
Health and Safety Executive
Highways Agency
Independent Power Networks Limited, Independent Pipelines Limited, GTC Pipelines Limited, The Electricity Network Company Limited and Quadrant Pipelines Limited
Marine Management Organisation
NATS
North Somerset Council
Public Health England
South Gloucestershire Council
Trinity House
Wales and West Utilities
Wiltshire Council

Bath & North East Somerset Council

Development
Bath & North East Somerset Council
Lewis House, Manvers Street, Bath, BA1 1JG

Telephone 01225 394041
(main switchboard)
www.bathnes.gov.uk

The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol
BS1 6PN

Date: 18th
February
2015
Our Ref: 15/00380/PREAPP
Your Ref: EN010034
Direct line: (01225) 477576
E Mail: Andrew_ryall@bathnes.gov.uk

Dear Ms. Nelson,

RE: Application by Scottish Power for an Order Granting Development Consent for the Avon Power Station

Thank you for your consultation letter of the 27th January 2015 in relation to the Scoping consultation and notification for the above development.

Having reviewed the submission the Council confirms that we have no comments to make on the proposals at this time.

Yours sincerely,


Andrew Ryall
Team Leader
Development Management

Bath and North East Somerset Council

Hannah Nelson

From: Smailes Baggy <Baggy.Smailes@caa.co.uk>
Sent: 27 January 2015 15:37
To: Environmental Services
Subject: RE: EN010034 – Avon Power Station – EIA Scoping Consultation

Dear Ms Nelson,

Proposed Avon Power Station – Scoping Comment

Thank you for your recent correspondence which sought Civil Aviation Authority (CAA) scoping comment related to the subject proposed development. I trust the following, which fundamentally mirrors related comment provided in respect of scoping requests for similar developments, meets the Planning Inspectorate's requirements.

We gather that the tallest associated new structure will be a single chimney stack of a height of 90 meters(m) and that no other associated structure will be higher than 45m. That being the case, whilst the related environmental documentation does not appear to make any mention of any aviation implications, we believe the following (potential) issues worthy of mention:

- **Aerodromes.** In respect of any potential aerodrome related issue, I should highlight the need for planning deliberations to take account of any safeguarding maps lodged with relevant planning authorities to identify any aerodrome specific safeguarding issues. Noting that aerodrome safeguarding responsibility rests in all cases with the relevant aerodrome operator / licensee, not the CAA, it is important that the related viewpoints of any relevant aerodrome license holders / operators is established and any concerns expressed taken into account.
- **Aviation Warning Lighting:**
 - In the UK, the need for aviation obstruction lighting on 'tall' structures depends in the first instance upon any particular structure's location in relationship to an aerodrome. If the structure constitutes an 'aerodrome obstruction' it is the aerodrome operator that with review the lighting requirement. For civil aerodromes, they will, in general terms, follow the requirements of CAP 168 - Licensing of Aerodromes. This document can be downloaded from the Civil Aviation CAA website at www.caa.co.uk/docs/33/CAP168.PDF - Chapter 4 (12.8) refers to obstacle lighting.
 - Away from aerodromes Article 219 of the UK Air Navigation Order applies. This Article requires that for en-route obstructions (ie away from aerodromes) lighting only becomes legally mandated for structures of a height of 150m or more. However, structures of lesser high might need aviation obstruction lighting if, by virtue of their location and nature, they are considered a significant navigational hazard.
 - Cranes, whether in situ temporarily or long term are captured by the points heighted above. Note that if a crane is located on top of another structure, it is the overall height (structure + crane) than is relevant. Crane operations are further discussed below.
 - In this case, even in the event that there is no aerodrome related need for lighting and notwithstanding the non-applicability of Article 219, given that the chimney stack would be amongst the tallest structures in the immediate vicinity, the CAA recommended the structure is equipped with low intensity steady red aviation warning lighting.
- **Gas Venting and/or Flaring.** It is assumed that the facility is not intended to vent or flare gas either routinely or as an emergency procedure such as to cause a danger to overlying

aircraft. If that is not the case parties are invited to use myself as an appropriate point of contact for any further related discussion.

- Aviation Promulgation. There is a civil aviation requirement in the UK for all structures over 300 feet (91.4m) high to be charted on aviation maps. It follows that, at face value the permanent structures would not need to be formally notified for generic civil aviation regulatory purposes. I should add however that even temporary 300ft+ structures such as cranes need to be notified for civil aviation purposes; crane operations are further discussed below.
- Crane Operations. CAA's 'Guidance to Crane Operators on Aviation Lighting and Notification' is available at <http://www.caa.co.uk/docs/33/CAP%201096%20In%20Focus%20-%20Crane%20Ops.pdf>. In respect of aviation warning lighting, there is a legal requirement for lighting on any crane with a maximum height of 150m or more. Moreover, the CAA further recommends that any crane of a maximum height of 60-150m is also fitted with aviation warning lighting. Additionally, if cranes on the site extend to a height of 300ft or more there will need to be consideration of the need to notify the cranes for civil aviation purposes. Temporary structures can be notified through the means of a Notice to Airmen (NOTAM). To arrange an associated NOTAM, a developer should contact the CAA's Airspace Utilisation Section (ausops@caa.co.uk / 0207 453 6599); they will need an accurate location, an accurate maximum height (including any carnage) and a completion date. If the crane is to be in place for in excess of 90 days it should be considered a permanent structure and will need to be notified as such: to that end you should contact the Defence Geographic Centre (dvof@mod.uk).
- Military Aviation. For completeness, the Ministry of Defence position in regards to the proposed development and military aviation activity should be established.
- I should also add that that due to the unique nature of associated operations in respect of operating altitudes and potentially unusual landing sites, it would also be sensible to establish the related viewpoint of local emergency services air support units.

I believe that any associated Environmental Statement / Development Consent Order (or equivalent / similar) would be expected to acknowledge and where applicable address the issues highlighted above and accordingly the scoping opinion should make related comment.

Whilst none of the above negates any aforementioned need to consult in line with Government requirements associated with the safeguarding of aerodromes and other technical sites (Government Circular 1/2003 refers), I hope this information matches your requirements. Please do not hesitate to get in touch if you require any further comment or needs clarification of any point.

Mark Smailes

Airspace Regulator
Safety and Airspace Regulation Group
Civil Aviation Authority
CAA House
45-59 Kingsway
London WC2B 6TE

Tel: 0207 453 6545

Application No. / Rhif Cais: 15/00187/MJR
Date / Dyddiad: 28/01/2015
Please ask for / Gofynnwch am : Richard Cole
Telephone / Ffon: 029223 30826



County Hall
Cardiff,
CF10 4UW
Tel: (029) 2087 2087

Neuadd y Sir
Caerdydd,
CF10 4UW
Ffôn: (029) 2087 2088

Ms H Nelson
The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol
BS1 6PN

PINS RECEIVED

30 JAN 2015

Dear Ms H Nelson

Town and Country Planning Act 1990 (As Amended)

Proposal: REQUEST FOR SCOPING CONSULTATION (SCOPE AND CONTENT OF AN ENVIRONMENTAL IMPACT ASSESSMENT (EIA) FOR AVON POWER STATION, A PROPOSED GAS-FIRED ELECTRICAL GENERATING STATION AND SUPPORTING INFRASTRUCTURE (THE PROPOSED DEVELOPMENT) ON THE FORMER 'GROWHOW WORKS' SITE IN SEVERNSIDE, AVONMOUTH)

Location: AVON POWER STATION, SEVERNSIDE, AVONMOUTH

I acknowledge receipt of your request for the observations of the County Council on the above proposal, which was received at this office on 27/01/2015.

I will forward the observations of the County Council as soon as possible.

Yours sincerely

Phil Williams
HEAD OF PLANNING

PLEASE REPLY TO: Development Management, Strategic Planning, Highways & Traffic & Transportation, County Hall, Cardiff, CF10 4UW (e-mail: developmentcontrol@cardiff.gov.uk) (internet: www.cardiff.gov.uk/dc)



Ms H Nelson
Planning Inspectorate
3/20 Eagle Wing
Temple Quay House (2 The Square)
Temple Quay
Bristol
Avon
BS1 6PN

Our ref: WX/2015/127365/01-L01
Your ref: EN010034
Date: 24 February 2015

Dear Ms Nelson

EIA SCOPING OPINION - PROPOSED COMBINED CYCLE GAS TURBINE POWER STATION AT AVON POWER STATION, SEVERNSIDE, BRISTOL

Thank you for referring the EIA Scoping Opinion for the above proposal, which was received on 27 January 2015.

Since then the applicant's consultants have confirmed that Scottish Power is reviewing its strategy for Avon. They have requested the Environment Agency to suspend all work associated with the Avon Power Station including ongoing work in responding to PINs in respect of the EIA Scoping Report.

In accordance with the above, I do not propose to comment further unless formally requested by the applicant or yourselves.

If you wish to discuss I can be contacted on 01278 484625.

Please quote the Agency's reference on any future correspondence regarding this matter.

Yours sincerely

Richard Bull
Sustainable Places - Planning Advisor

Direct dial 01278 484625
Direct fax 01278 452985
Direct e-mail nwx.sp@environment-agency.gov.uk

Environment Agency
Rivers House, East Quay, Bridgwater, Somerset, TA6 4YS.
Customer services line: 03708 506 506
www.gov.uk/environment-agency
End

Hannah Nelson

From: Margaret.Ketteridge@gtc-uk.co.uk
Sent: 30 January 2015 16:24
To: Environmental Services
Subject: EN010034

Dear Sirs

With reference to the above I can confirm that the following have no comments to make at this moment in time.

Independent Power Networks Limited
Independent Pipelines Limited
GTC Pipelines Limited
The Electricity Network Company Limited
Quadrant Pipelines Limited

Kind Regards

Maggie

Maggie Ketteridge
Engineering Support Officer
GTC
Energy House
Woolpit Business Park
Woolpit
Bury St Edmunds
Suffolk, IP30 9UP
Tel: 01359 245406
Fax: 01359 243377
E-mail: margaret.ketteridge@gtc-uk.co.uk
Web: www.gtc-uk.co.uk

NOTE:

This E-Mail originates from GTC, Energy House, Woolpit Business Park, Woolpit, Bury St Edmunds, Suffolk, IP30 9UP
VAT Number: GB688 8971 40. Registered No: 029431.

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Our ref: HD.03.20/JA/MH
Your ref: EN010034

Mrs Jacqui Ashman
Asset Manager
2/08K
Temple Quay House
2 The Square, Temple Quay
Bristol BS1 6HA

The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2 The Square
Bristol, BS1 6PN

Direct Line: 0117 372 8756
Fax: 0117 372 8100

10 February 2015

For the attention of Hannah Nelson

Dear Hannah Nelson

**PLANNING ACT 2008 (AS AMENDED) AND THE INFRASTRUCTURE PLANNING
(ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2009 (AS AMENDED)
– REGULATIONS 8 AND 9**

**APPLICATION BY SCOTTISH POWER FOR AN ORDER GRANTING
DEVELOPMENT CONSENT FOR THE AVON POWER STATION**

**SCOPING CONSULTATION AND NOTIFICATION OF THE APPLICANT'S CONTACT
DETAILS AND DUTY TO MAKE AVAILABLE INFORMATION TO THE APPLICANT
IF REQUESTED**

The Highways Agency ("the Agency") is a statutory consultee on development consent order applications under the Planning Act 2008 (as amended) and the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended). The Agency therefore welcomes pre-application discussion, including the opportunity to provide advice on the scope of any Environmental Statement pursuant to the procedures set out the above regulations.

Following receipt of your Avon Power Station Environmental Impact Statement (EIA / ES) Scoping Report (SR) dated January 2015, you have invited the Agency to provide comments on the scope of an Environmental Statement in respect of CCGT power station proposals.

I have set out below both the general and specific areas of concerns that the Agency would wish to see considered as part of an ES. The comments relate specifically to matters arising from the Agency's responsibilities to manage and maintain the Strategic Road Network (SRN) in England.

Comments relating to the local road network should be sought from the appropriate local highway authority.

General aspects to be addressed in all cases:

- An assessment of transport related impacts of the proposal should be carried out in line with current policy requirements, namely NPPF and Circular 02/2013 "The Strategic Road Network and the Delivery of Sustainable Development",
- Environmental impact arising from any disruption during construction, traffic volume, composition or routing change and transport infrastructure modification should be fully assessed and reported.
- Adverse change to noise and to air quality should be particularly considered, including in relation to compliance with the European air quality limit values and/or in local authority designated Air Quality Management Areas (AQMAs).
- No new connections are permitted to the Highways Agency drainage network. In the case of an existing 'permitted' connection, this can only be retained if there is no land use change.
- Development must not lead to any surface water flooding on the Strategic Road Network (SRN) carriageway.

Location and development specific considerations include:

- The SR identifies there to be 'several options for supporting infrastructure to serve the main generating units' and 'two configuration options for the main CCGT units, including a single shaft option and a multi-shaft option'. It is suggested that at this stage in the application process, the final decision as to which design configuration will be adopted has not yet been made, and therefore the environmental implications of both designs will be assessed as part of the ES process.

Whilst this approach is acceptable to the Agency, our preference would be for a fixed development scheme to be considered in the ES process, and to form the basis of a Transport Assessment (TA) and Travel Plan (TP) accompanying a development consent order application. That said, the Agency will consider all development options presented;

- The SR provides consideration of two site access points, with one access possible onto a new spine road from the A403, being constructed in association with planning consent granted (ref 1957/58) on the Severnside Distribution Land. The SR also suggests the potential for a rail spur to be re-established for use during the construction phase of the proposals, connecting to the existing Avonmouth to Severn Beach rail line. Both infrastructure considerations would have varying implications for traffic generation and its assignment on the SRN, and therefore it would be the Agency's preference, that these are fixed before consideration in the ES / TA process. The Agency will however consider each access option if necessary;

- The SR anticipates that construction of the proposals will be built in a single phase and last approximately 3 years starting 2018. The SR suggests a Construction Traffic Management Plan (CTMP) will be provided. This will be a primary concern for the Agency, as construction vehicles are predominantly anticipated to travel on the SRN to access the site. A full review of vehicle volumes, types and routing assumptions will be required for HGV material deliveries, site machinery and staff, etc. Any abnormal vehicle movements will also need to be established.
- The SR states that *'the effects of operational traffic (of the development) would be negligible and a detailed assessment of the operational phase of the development is not proposed for the ES'*. At this stage it is too early to determine if the operational phase of the development would have no impact on SRN operation, and therefore the Agency would require full details of this phase to be presented in the TA / ES.
- The SR envisages that the plant will have a design life of at least 25 years, from which point it would likely be decommissioned. Should decommissioning have implications for travel on the SRN, then the transport implications of decommissioning will also require inclusion in the ES and TA;
- Given the scale of the proposals, a Travel Plan would be required to accompany application;

These comments are only advisory, as the responsibility for determining the final scope of the ES would rest with the Secretary of State.

The Agency comments imply no pre-determined view as to the acceptability of the proposed development in traffic, environmental or highway terms. Should the applicant wish to discuss the merits of the proposal in terms of the likely impact on the SRN, please do not hesitate to contact me.

Yours sincerely



Mrs Jacqui Ashman
Network Delivery & Development (South West)
Email: jacqui.ashman@highways.gsi.gov.uk

cc: Miles Hodgson CH2M Hill
Scottish Power Generation Ltd

PINS RECEIVED

23 FEB 2015

HID Policy - Land Use Planning
NSIP Consultations
Building 5S.2, Redgrave Court
Merton Road, Bootle
Merseyside, L20 7HS

Your ref: EN010034
Our ref: 4.2.1.4475

HSE email: NSIP.applications@hse.gsi.gov.uk

FAO Hannah Nelson
EIA & Land Rights Advisor
The Planning Inspectorate
3/18 Eagle Wing
Temple Quay House
2, The Square
Bristol
31 6PN

20 February 2015

Dear Ms Nelson

**PROPOSED AVON POWER STATION DEVELOPMENT (the project)
PROPOSAL BY SCOTTISH POWER GENERATION LTD (the applicant)
INFRASTRUCTURE PLANNING (ENVIRONMENTAL IMPACT ASSESSMENT) REGULATIONS 2009 (as amended) – Regulations 8 and 9**

Thank you for your letter of 27 January 2015 regarding the information to be provided in an environmental statement relating to the above project.

HSE does not comment on EIA Scoping Reports but the following information is likely to be useful to the applicant.

HSE's land use planning advice

Will the proposed development fall within any of HSE's consultation distances?

HSE notes that the proposed development land appears to subsume the land associated with 2 extant Hazardous Substances Consents. This is the land that was formerly occupied by JH Bunn Ltd and Terra Nitrogen (UK) Ltd. Should the development proceed as proposed, the consents would be likely to transfer to the applicant. Unless the applicant seeks to utilise the existing consents, it is suggested that discussions be held between the Hazardous Substances Authority and the applicant to arrange their revocation.

In addition, the proposed development lies in close proximity to other Major Accident Hazard sites and pipelines:

- Calor Gas Ltd
- Astra Zeneca plc
- Avonmouth LNG Storage, National Grid Gas plc
- Esso pipeline

If the proposed site is to have occupied buildings, the positioning of the buildings should take into account the existing consultation zones. HSE land-use planning guidance may be found at www.hse.gsi.gov.uk/landuseplanning/index.htm. If these consents remain unchanged, HSE would advise against this application if more than 100 people or 3 or more occupied storeys are proposed for the development. (See www.hse.gov.uk/landuseplanning/padhi.pdf).

It is suggested that the applicant contact the pipeline operator to establish the position of the pipeline relative to the development.

Hazardous Substances Consent

The presence on, over or above land of certain hazardous substances, at or above set threshold quantities (Controlled Quantities), may require Hazardous Substances Consent (HSC) under the Planning (Hazardous Substances) Act 1990 as amended. The substances, alone or when aggregated with others, for which HSC is required, and the associated Controlled Quantities, are set out in The Planning (Hazardous Substances) Regulations 1992 as amended by The Planning (Hazardous Substances) (Amendment) (England) Regulations 2009 and 2010.

Hazardous Substances Consent would be required if the site is intending to store or use any of the Named Hazardous Substances or Categories of Substances and Preparations at or above the controlled quantities set out in Schedule 1 of these Regulations.

Further information on HSC should be sought from the relevant Hazardous Substances Authority.

Explosives sites

The proposed M20 Junction 10A improvement does not impinge on the separation distances of any explosives licensed site in the vicinity of the application.

Electrical Safety


The project involves connections to electrical power distribution systems and has an impact on the existing generation, transmission and distribution assets on the UK mainland. In the light of that, HSE offers the following comments:

As well as satisfying general health and safety legislation (ie the Health and Safety at Work etc Act 1974 and supporting regulations), the proposed design and future operations must comply with the Electricity at Work Regulations 1989 and the Electricity, Safety, Continuity and Quality Regulations 2002 as amended. Generators, distributors, their contractors and others have defined duties in order to protect members of the public from the dangers posed by the electrical equipment used. HSE enforces the safety aspects of these regulations. If you have any doubts about the particular application of these regulations in terms of either the operation or construction of generators, substations, overhead lines or underground cables please contact Mr J C Steed, Principle Specialist Electrical Inspector, either at john.steed@hse.gsi.gov.uk or Rose Court GSW, 2 Southwark Bridge Road, London, SE1 9HS.

Please send any further electronic communication on this project directly to the HSE's designated e-mail account for NSIP applications. Alternatively any hard copy correspondence should be sent to:

Mr Dave Adams (MHPD)
NSIP Consultations
5S.2 Redgrave Court
Merton Road
Bootle
Merseyside L20 7HS

Yours sincerely,


Dave Adams
HID Policy Division - Land Use Planning

From: [Navigation Directorate](#)
To: [Environmental Services](#)
Cc: [Nick Dodson](#); [Martin Thomas](#)
Subject: RE: EN010034 – Avon Power Station – EIA Scoping Consultation
Date: 24 February 2015 11:44:10

Good morning Hannah,

We note that the development site boundary extends well below the high water mark and into the Bristol Channel. Therefore the applicant should include a marine navigation risk assessment (MNRA) detailing all works below the high water mark and their associated environmental impacts in their environmental statement. This MNRA should also consider appropriate risk mitigation measures that may be required as a result of these marine construction works.

Of course we would be happy to discuss such matters directly with the applicant in due course.

Kind regards,

Steve Vanstone
Navigation Services Officer

From: Environmental Services [<mailto:EnvironmentalServices@infrastructure.gsi.gov.uk>]
Sent: 27 January 2015 14:48
To: Navigation Directorate
Cc: Nick Dodson
Subject: EN010034 – Avon Power Station – EIA Scoping Consultation

Dear Sir/Madam

Please see the following hyperlink to correspondence on the proposed Avon Power Station.

http://infrastructure.planningportal.gov.uk/wp-content/uploads/2015/01/150127_EN010034_Letter-to-stat-cons_Scoping-AND-Reg-9-Notification_English.pdf

Please note the deadline for consultation responses is **Tuesday 24 February 2015**, and is a statutory requirement that cannot be extended.

Kind regards,

Hannah Nelson
EIA and Land Rights Advisor

Major Applications and Plans, The Planning Inspectorate, Temple Quay House,
Temple Quay, Bristol, BS1 6PN

Direct Line: 0303 444 5061

Twitter: [@PINSgov](#)
Helpline: 0303 444 5000
Email: EnvironmentalServices@infrastructure.gsi.gov.uk

Web: www.planningportal.gov.uk/planninginspectorate (Planning Inspectorate casework and appeals)

Web: www.planningportal.gov.uk/infrastructure (Planning Inspectorate's National Infrastructure Planning portal)

This communication does not constitute legal advice.
Please view our [Information Charter](#) before sending information to the Planning



Our reference: DCO/2015/00002

Avon Power Station

Response to Consultation on the Environmental Scoping Report, dated January 2015

1. Introduction

- 1.1. An Environmental Scoping Report 'Avon Power Station EIA Scoping Report' dated January 2015 (the "Report") has been prepared by URS Infrastructure and Environment Ltd on behalf of Scottish Power Generation Ltd and submitted to PINS. This report will form part of the Environmental Impact Assessment ("EIA") process.
- 1.2. No pre-application engagement has been undertaken regarding this project and therefore the MMO's response is based solely upon the information contained within this report.

2. The project

- 2.1. The applicant is proposing to develop a gas-fired electrical generating station, and supporting infrastructure including connections to the UK gas and electricity transmission systems, potential connections to facilitate water supply and discharge, and potential road and rail access improvements. ("Project").
- 2.2. The Proposed Development will provide up to 1,800 MW of electricity generation capacity at site rated conditions. The electrical output capacity will be generated from up to two units of Combined Cycle Gas Turbines (CCGTs) and potentially up to 300 MW capacity of Fast Response Generators installed on the same site.
- 2.3. The Project will consist of:
 - The main development "Site", located on the former Growhow Works site in Severnside, Avonmouth, covers approximately 45 hectares (ha) and will provide up to 1,800 MW of electricity generation capacity at site rated conditions. The electrical output capacity will be generated from up to two units of Combined Cycle Gas Turbines (CCGTs) and potentially up to 300 MW capacity of Fast Response Generators installed on the same site.
 - The potential development "Boundary" comprises an area of approximately 154 ha, including connection routes for the proposed gas connection to the National Grid Gas Transmission network (named the Feeder 14 pipeline) and the proposed electricity connection to the National Grid. This site area may further include a water supply pipeline to/ from Wessex Water wastewater treatment

facility or Littleton water treatment works, and may also include an electrical connection to Aust.

- 2.4. Current project details are very high level and as such are subject to change.

3. The MMO's role in Nationally Significant Infrastructure Projects

- 3.1. The Marine Management Organisation (the "MMO") was established by the Marine and Coastal Access Act 2009 (the "2009 Act") to make a contribution to sustainable development in the marine area and to promote clean, healthy, safe, productive and biologically diverse oceans and seas.
- 3.2. The responsibilities of the MMO include the licensing of construction works, deposits and removals in the marine area by way of a marine licence¹. Marine licences are required for deposits or removals of articles or substances below the level of mean high water springs ("MHWS"), unless a relevant exemption applies.
- 3.3. In the case of Nationally Significant Infrastructure Projects ("NSIPs"), the Planning Act 2008 (the "2008 Act") enables Development Consent Orders ("DCO") for projects that affect the marine environment to include provisions for deemed marine licences². Alternatively, applicants may wish to separately seek consent for a marine licence directly from the MMO rather than having it deemed by a DCO.
- 3.4. For NSIPs where applicants choose to have a marine licence deemed by a DCO, during pre-application the MMO will advise developers on the aspects of a project that may have an impact on the marine area or those who use it. In addition to considering the impacts of any construction within the marine area, this would also include assessing any risks to human health, other legitimate uses of the sea and any potential impacts on the marine environment from terrestrial works.
- 3.5. Whether a marine licence is deemed within a DCO or consented independently by the MMO, the MMO is the delivery body responsible for post-consent monitoring, variation, enforcement and revocation of provisions relating to the marine environment. As such, the MMO has a keen interest in ensuring that provisions drafted in a deemed marine licence enable the MMO to fulfil these obligations. This includes ensuring that there has been a thorough assessment of the impact of the works on the marine environment (both direct and indirect), that it is clear within the DCO which works are consented within the deemed marine licence, that conditions or provisions imposed are proportionate, robust and enforceable and that there is clear and sufficient detail to allow for monitoring and enforcement. To achieve this, the MMO would seek to agree the deemed marine licence with the developer for inclusion with their application to the Planning Inspectorate ("PINS").
- 3.6. Further information on licensable activities can be found on the MMO's website³. Further information on the interaction between PINS and the MMO can be found in our joint advice note⁴.

¹ Under Part 4 of the 2009 Act

² Section 149A of the 2008 Act

³ <http://www.marinemanagement.org.uk/licensing/marine.htm>

- 3.7. The MMO recognises there is some overlap between the geographical jurisdiction of the MMO and the local planning authorities (i.e. between MHWS and mean low water springs).
- 3.8. The MMO has considered this and is of the view that matters which fall within the scope of the marine licensing provisions of the 2009 Act (i.e. anything below MHWS) are generally best regulated by conditions on marine licences. This should minimise the risk of inconsistency between different schemes of regulation, or of a duplication of controls.
- 3.9. In considering applications for marine licences to be consented independently by the MMO, the MMO regularly consults with bodies including, but not limited to:
- the Environment Agency (specific remit detailed below)
 - Natural England
 - Natural Resources Wales (for works in or affecting Wales)
 - the Maritime and Coastguard Agency
 - English Heritage
 - local planning authorities
 - local harbour authorities
 - local inshore fisheries and conservation authorities (specific remit detailed below)
 - the Royal Yachting Association
 - the Royal Society for the Protection of Birds
 - the corporation of the Trinity House of Deptford Strond.

Where a marine licence is to be deemed within a DCO, the MMO would expect that comments provided by the above list of bodies and any other relevant bodies are taken into consideration.

4. Activities for this project which would be licensable under the 2009 Act

- 4.1. As stated previously current details on the project are very high level, however based upon the information available to date the MMO has identified the following potentially licensable activities:
- Construction of a new outfall or maintenance of existing outfall to supply/remove water from the facility – if Direct water or Hybrid cooling technology is employed.
 - Construction of a fish recovery and returns system and/or acoustic fish deterrent system.
 - Flood defence maintenance/upgrading – if current defences are not deemed suitable.
 - Connectors to facilitate water discharge and possibly to the onsite water treatment plant or potential diversion of existing water or effluent pipelines.

⁴ <http://infrastructure.planningportal.gov.uk/wp-content/uploads/2013/04/Advice-note-11-v2.pdf>

Currently this requirement has not been fully explained and will require clarification at EIA stage.

- 4.2. It should be noted that the western boundary of the “indicative electrical connection study area towards Aust Substation” extends seaward lower than MHWS. Although unlikely that activities in this area will extend past MHWS, as stated in Section 3.2, works below MHWS may require a marine licence.
- 4.3. At this time the Report does not commit to the method of water cooling that is to be used, nor the method of water return if Hybrid cooling is used. Therefore the suitability of the existing outfall cannot be determined. To that end, no methodology for replacing the existing outfall has been supplied. This may be a significant project and may require considerations not listed above. The MMO would expect to see each activity clearly described and assessed during the EIA process. This should also include ongoing activities which may be necessary, such as outfall maintenance.
- 4.4. There is uncertainty around the construction of a “peaking plant” at this stage. Few details of the plant are provided, except to note that it will be on the same Site as the main Project. The peaking plant may also require marine licences for construction, operation and decommission.
- 4.5. Any additional works or activities in the marine area that may require a marine licence under the 2009 Act should be notified to the MMO at the earliest opportunity and the impacts of such works considered in the EIA process. This is the same for the study area to the south of the Site that abuts MHWS. It is noted that whilst only a minor part of the footprint extends into the marine environment all potential impacts must be considered within the ES.
- 4.6. Paragraph 3.43 of the Report mentions that mitigation measures will be outlined in the Construction Environment Management Plan (CEMP) to reduce potential impacts to the environment (Paragraph 6.34, for example) and other receptors. Please be aware that mitigation measures themselves may constitute licensable activities under the 2009 Act. Further information should be provided regarding these during the EIA process.
- 4.7. The MMO expect details of decommissioning activities to be included within the EIA, aspects of which may also require a marine licence.

5. Comments on the Report

General comments

- 5.1. The Report provides a broad overview of the Project; however, due to the high level nature of the document and lack of a definitive methodology or chosen option, confidence in the assessments made is limited. For example, paragraphs 3.3 and 3.4 of the report outline two different shaft options and as stated in Paragraph 3.16 of the Report, the cooling system has not been finalised. This limits confidence that all relevant elements of the Project have been scoped in regards to impact

pathways and receptors. Such confidence is key in identifying licensable marine activities and assessing the potential impacts to the marine environment.

- 5.2. There is currently limited information provided with regard to the construction methodology. The construction methodology should be fully explained within the ES in order that a robust assessment of potential environmental risks can be made.
- 5.3. Where impact pathways and receptors are scoped out, the Environmental Statement (“ES”) will need to clearly justify the rationale for the approach taken and decisions made.
- 5.4. The MMO would welcome sight of relevant baseline studies during the pre-application phases of the project to ensure their suitability to support the assessment.
- 5.5. Where there is overlap in subject matter, cross referencing to other relevant chapters should be provided.
- 5.6. The MMO notes the acknowledgement of adjacent projects that may lead to cumulative impacts as outlined in Paragraph 2.12 and Section 8 of the Report, especially pertaining to a Third Party separate CCGT power station. The European Commission (1999) and IEMA (2004) guidance should be used for the Cumulative Impacts Assessment.
- 5.7. Sections 1 and 5 of the Report give an account of the consenting regime; however that the MMO wish to highlight that should works occur below MHWS, then a Deemed Marine Licence will also be required as part of the accompany the DCO.

Chapter 2 – Description of the Existing Environment

- 5.8. The main site is separated from the Severn Estuary foreshore by a road and railway embankment. At present the site boundary is shown to protrude into the Severn Estuary in the area around existing outfall pipe. As the location of the Works and Boundary are significant in size, any tidal water bodies should be clearly identified in the EIA. This includes whether any of the Rhines or onsite reservoirs are tidal.
- 5.9. Paragraph 2.19 of the Report outline the previous environmental studies completed. There is no mention of marine based studies, although the MMO appreciates that the list is not exhaustive. Any marine environmental data of this nature is essential in an EIA for a project with potential impacts on the marine environment.

Chapter 3 – Project Description

- 5.10. Paragraph 3.1 of the Report outlines the main development activities, providing a high level overview of the Project. Whilst it is appreciated that at this stage of the Project final designs are yet to be agreed, and the applicant is seeking to work to the Rochdale Envelope approach, the lack of detail lowers confidence in the identification of impact pathways and receptors and assessments made. A detailed design of the project, and any variations thereof, must be presented and assessed

within the EIA process, as is outlined in the Planning Inspectorates Advice Note 9: Using the Rochdale Envelope.

- 5.11. At the EIA stage it would be agreeable to have the ambiguity of the potential return of water to Wessex Water Wastewater treatment works confirmed. This will take another variable out of consideration and make it easier to identify all relevant impact pathways.
- 5.12. The MMO welcomes the applicant's proposal to provide a Construction Environmental Management Plan (CEMP) as part of the EIA process as noted in Section 3.43 of the Report. Monitoring and mitigation measures should be included in the CEMP. Please also note earlier comments in paragraph 4.5.

Chapter 4 – Project Alternatives

- 5.13. Paragraph 4.5 of the Report states that the site was selected due to the proximity of existing infrastructure regarding gas, electricity and water. None of these factors are definitely going to be used in the final methodology. There should be a justification in the EIA as to why this site is to be used if none of these facilities are to be used.
- 5.14. The MMO note that a section regarding Best Available Techniques will be available in the EIA as this will clarify the choice of cooling technology and method of electrical connection.

Chapter 5 - Planning Policy

- 5.15. The Project falls within the boundary of the South West Inshore Marine Plan. This Plan is not yet live and has no current material consideration in planning. This Plan may come into consideration during the planning phase of these works. The Plan will have regard to the Marine Policy Statement (MPS). Until the publication of such a Plan, any planning decision made relating to this Project must have regard to the MPS. As such, the EIA should demonstrate how the project meets the objectives of the MPS and should include how the objectives support the Project. The MMO will also follow the MPS when providing advice to PINS.
- 5.16. Biodiversity Action Plan (BAP) habitats and species are not mentioned within the Report. These should be included in the EIA. BAP priority lists are now considered as habitats or species of principal importance for the conservation of biodiversity in England under the 2006 Natural Environment and Rural Communities (NERC) Act.
- 5.17. Natural England is currently planning to update the Regulation 33 Package for the Severn Estuary SAC, SPA and Ramsar site. The Regulation 33 package outlines the conservation objections that determine site integrity. The document may become live at some point during pre or post construction.

Chapter 6 - Potentially Significant Environmental Issues

Ornithology

- 5.18. The MMO's comments on this section of the Report relate to those matters inside of the MMO's remit, therefore the comments relate only to seabirds and marine ornithology. The MMO cannot determine the suitability to the data collection regarding both overwintering and resident birds, especially for those that are features of the Severn Estuary SPA and Ramsar site as there is a lack of detail in this section. We look forward to viewing sufficient replicates of data that will allow for a significantly robust dataset as we note that data on a range of ecological receptors are available for the Site as per Paragraph 6.47 of the Report.
- 5.19. Walk over surveys were undertaken in May and June of 2013. These would not capture over wintering birds or the migratory birds outlined in Criterion 4 of the Severn Estuary Ramsar citation. Relevant data will need to be presented at the EIA.
- 5.20. The 2013 survey noted that the area where the outfall is located was heavily used by waterfowl. Waterfowl are a qualifying feature the Severn Estuary SPA and are cited under Criterion 5 of the Severn Estuary Ramsar site. Potential impacts to this feature should be thoroughly explored in the EIA.
- 5.21. It is unclear whether all relevant marine and coastal bird species will be included in the assessment. Redshank are mentioned but appear to be discounted as a single survey deemed that they are not breeding and therefore not significant. The MMO would recommend that all species that are features of adjacent designations are included, and if discounted a clear explanation, grounded in science, is supplied.
- 5.22. The MMO recommends that the applicant does not only focus on the ornithological features that are cited within the adjacent European and domestic sites. The Project area also abuts an area that the Royal Society for the Protection of Birds deem an important area for birds. The birds from this site may not be the same species that are designated in the immediate area.

Benthic Ecology

- 5.23. The scoping report does not include any baseline data or consideration of potential impacts to marine ecology, although we note that an aquatic invertebrate survey will be undertaken in 2015 as per Paragraph 6.46.
- 5.24. The MMO look forward to the intrtidal phase I biotope mapping as stated in Paragraph 6.46, which will identify SAC features within and adjacent to the Project area. It will then be possible for impact pathways to receptors to be identified and mitigated against. These should be outlined in the EIA.
- 5.25. Paragraph 6.5 states that should the outfall works be retained within the DCO that they intend to undertake marine and benthic surveys. Should this be the case the MMO recommend early discussion to agree the scope of such surveys.

Fisheries

- 5.26. The EIA should consider fisheries (including migratory species), marine ecology and designated marine habitat. Even if the potential impacts are found to be insignificant, this should be presented with details of how this conclusion was met. Regard should be given, but not limited to, the species outlined in Ramsar Criterion 4 and 8 of the Severn Estuary Ramsar site. Consideration should be given individual receptors cited within the Criteria to make specific pathways clearer or clarify the use of judgement where necessary.
- 5.27. There are a number of species that need to be taken into consideration within the EIA. The sensitive receptors are diadromous fish and other fish fauna of conservation/commercial interest. The juvenile stages of larger fish species use the estuary as a nursery ground, namely anglerfish and plaice.
- 5.28. The applicant has not identified any fish species designated under OSPAR nor any other sensitive species of fish in the location of the works. These will need to be confirmed in an EIA.
- 5.29. There is little consideration of the impacts on fish and fish populations. A loss in fish populations may also have an indirect impact on features for which the Severn Estuary SPA and Ramsar site have been classified. Consideration to changes in fish populations and impacts of prey structures should be considered and cross references should be provided where appropriate.
- 5.30. As the final cooling system is not yet known, it is not understood whether water extraction from the Estuary is needed. If Direct cooling is to be employed then the MMO would expect information on how fish would interact with the intake including entrainment and impingement issues.
- 5.31. It is advised that Devon and Severn Inshore Fisheries Conservation Authority is consulted regarding this proposal given their localised knowledge and expertise with the fisheries in this area. It is also recommended the Environment Agency is consulted as they will be able to provide local knowledge on migratory species.

Underwater Noise

- 5.32. The MMO welcome the applicant's proposal to scope in potential impacts of noise and vibration in relation to ecological receptors as per Paragraph 6.20. The applicant should ensure that the assessment for underwater noise is in line with NPL Guidance (NPL, 2014). If an underwater noise assessment is scoped out of the EIA process, the final ES should clearly justify the reasons.

Land Contamination

- 5.33. Paragraph 6.70 of the Report outlines that previous surveys undertaken on the site have found elevated levels of toxins present on the site. These have the potential to interact with the surrounding environment, particularly the adjacent marine environment. The MMO would expect this to be assessed in the EIA even if works on the existing outfall are not proposed as described in Paragraph 6.77.

- 5.34. No mention of chemicals e.g. biocides to maintain pipelines is made within the report. This should be clarified and confirmed and should chemicals be used, an assessment of their potential effect on sensitive marine receptors should be included within the ES.

Coastal Processes

- 5.35. Potential impacts on coastal processes from either construction of a new outfall / intake or maintenance of existing facilities should be undertaken. This assessment should include any changes to the hydrodynamic regime or morphology of the river and any impacts this may have on existing infrastructure in the estuary. Relevant construction activities should be assessed for impact pathways to receptors. If potential pathways to other receptors such as ornithology are present these sections should be cross referenced.
- 5.36. There are four sites of Importance for Nature Conservation in the vicinity. One is located on the intertidal area to the south of the Site, and it should be assessed for any impact that the Project would have on coastal processes.
- 5.37. We would expect the EIA (and final ES) to provide water quality parameters such as water abstraction and discharge rates, volumes and temperature at discharge.
- 5.38. Consideration needs to be given to modelling extreme events and climate change. Modelling should cover the cooling water discharges, contaminant concentrations, sediment disturbance and provide sensitivity analysis to cover inherent variability and uncertainty of final design methodology.

Visual Impacts

- 5.39. Cross boarder visual issues need to be included in an EIA given the proximity to the Welsh coastline. This is outlined in the Report as being insignificant due to the heavily modified area that the Site is located. This should be documented in the EIA.

Chapter 7 - Non-Significant EIA Issues

- 5.40. The ES should detail and provide evidence why certain receptors have been scoped out of the assessment, shellfish for example.

6. Consultation process and next steps

- 6.1. The items highlighted in this letter should be considered in the EIA process, and evidenced in the ES. However, this should not be seen as a definitive list of all EIA/ES requirements and other work may prove necessary once further details of the project have been identified.
- 6.2. The MMO would like to encourage consultation with URS and Scottish Power to clarify the proposed works and identify potential impacts and mitigation measures.

Hannah Nelson

From: ROSSI, Sacha <Sacha.Rossi@nats.co.uk>
Sent: 04 February 2015 16:52
To: Environmental Services
Cc: NATS Safeguarding
Subject: RE: EN010034 – Avon Power Station – EIA Scoping Consultation

Dear Sir/Madam,

NATS anticipates no impact from the proposal and has no comments to make.

Regards
S. Rossi
NATS Safeguarding Office

Mr Sacha Rossi
ATC Systems Safeguarding Engineer

☎: 01489 444 205
✉: sacha.rossi@nats.co.uk

NATS Safeguarding
4000 Parkway,
Whiteley, PO15 7FL

<http://www.nats.co.uk/windfarms>

From: Environmental Services [<mailto:EnvironmentalServices@infrastructure.gsi.gov.uk>]
Sent: 27 January 2015 14:23
To: NATS Safeguarding
Subject: EN010034 – Avon Power Station – EIA Scoping Consultation

Dear Sir/Madam

Please see the following hyperlink to correspondence on the proposed Avon Power Station.

http://infrastructure.planningportal.gov.uk/wp-content/uploads/2015/01/150127_EN010034_Letter-to-stat-cons_Scoping-AND-Reg-9-Notification_English.pdf

Please note the deadline for consultation responses is **Tuesday 24 February 2015**, and is a statutory requirement that cannot be extended.

Kind regards,

Hannah Nelson
EIA and Land Rights Advisor

Hannah Nelson

From: Philip Anelay <Philip.Anelay@n-somerset.gov.uk>
Sent: 02 February 2015 09:58
To: Environmental Services
Cc: Richard Kent; Michael Reep; Graham Quick; Rob Worgan
Subject: Scoping consultation for Application by Scottish Power for an Order granting Development Consent fo the Avon Power Station

For the attention of Hannah Nelson, EIA and Land Rights Advisor, The Planning Inspectorate

Dear Ms Nelson

Thank you for your letter of 27 January 2015 to our Head of Planning, regarding the information to be provided in the environmental statement for the above application, which relates to a proposed gas fired electricity generation station and supporting infrastructure on the former "Growhow Works" at Severnside, Avonmouth, by Scottish Power Generation Ltd.

The letter has been passed to me for attention. I do not have any comments to make.

Regards

Phil Anelay

Planning Policy

North Somerset Council

01934 426942

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2 The Square
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BS1 6P
F.A.O. Hannah Nelson

Your Ref : EN010034
Our Ref : ENFFGS 150127 376

24th February 2015

Dear Hannah,

**Re: Scoping Consultation
Application for an Order Granting Development Consent for the proposed
Avon Power Station**

Thank you for including Public Health England (PHE) in the scoping consultation phase of the above application. Our response focuses on health protection issues relating to chemicals and radiation. Advice offered by PHE is impartial and independent.

In order to ensure that health is fully and comprehensively considered the Environmental Statement (ES) should provide sufficient information to allow the potential impact of the development on public health to be fully assessed.

We understand that the promoter will wish to avoid unnecessary duplication and that many issues including air quality, emissions to water, waste, contaminated land etc. will be covered elsewhere in the ES. PHE however believes the summation of relevant issues into a specific section of the report provides a focus which ensures that public health is given adequate consideration. The section should summarise key information, risk assessments, proposed mitigation measures, conclusions and residual impacts, relating to human health. Compliance with the requirements of National Policy Statements and relevant guidance and standards should also be highlighted.

In terms of the level of detail to be included in an ES, we recognise that the differing nature of projects is such that their impacts will vary. Any assessments undertaken to inform the ES should be proportionate to the potential impacts of the proposal, therefore we accept that, in some circumstances particular assessments may not be relevant to an application, or that an assessment may be adequately completed using a qualitative rather than quantitative methodology. In cases where this

decision is made the promoters should fully explain and justify their rationale in the submitted documentation.

It is noted that the current proposals do not appear to consider possible health impacts of Electric and Magnetic Fields (EMF). The proposer should confirm either that the proposed development does include or impact upon any potential sources of EMF; or ensure that an adequate assessment of the possible impacts is undertaken and included in the ES.

The proposer should also be aware that there have been a number of concerns regarding local air quality raised by the local community who have brought these issues to the attention of the local MP, Bristol City Council and ourselves at PHE. We would hope and expect that in the light of these community concerns the proposer will fully engage with any plans the council and PHE develop to mitigate those concerns.

PHE notes that the development is just over 4km to the North/ North East of the concerned community but we recommend that the future air quality assessments fully consider any possible impacts on any local communities that may arise as a result of the construction, commissioning, operation, maintenance or decommissioning of the proposed development. Furthermore we would recommend that cumulative impacts are fully considered and addressed in subsequent submissions.

The attached appendix outlines generic areas that should be addressed by all promoters when preparing ES for inclusion with an NSIP submission. We are happy to assist and discuss proposals further in the light of this advice.

Yours sincerely



Allister Gittins
Environmental Public Health Scientist

nsipconsultations@phe.gov.uk

Please mark any correspondence for the attention of National Infrastructure Planning Administration.

Appendix: PHE recommendations regarding the scoping document

General approach

The EIA should give consideration to best practice guidance such as the Government's Good Practice Guide for EIA¹. It is important that the EIA identifies and assesses the potential public health impacts of the activities at, and emissions from, the installation. Assessment should consider the development, operational, and decommissioning phases.

It is not PHE's role to undertake these assessments on behalf of promoters as this would conflict with PHE's role as an impartial and independent body.

Consideration of alternatives (including alternative sites, choice of process, and the phasing of construction) is widely regarded as good practice. Ideally, EIA should start at the stage of site and process selection, so that the environmental merits of practicable alternatives can be properly considered. Where this is undertaken, the main alternatives considered should be outlined in the ES².

The following text covers a range of issues that PHE would expect to be addressed by the promoter. However this list is not exhaustive and the onus is on the promoter to ensure that the relevant public health issues are identified and addressed. PHE's advice and recommendations carry no statutory weight and constitute non-binding guidance.

Receptors

The ES should clearly identify the development's location and the location and distance from the development of off-site human receptors that may be affected by emissions from, or activities at, the development. Off-site human receptors may include people living in residential premises; people working in commercial, and industrial premises and people using transport infrastructure (such as roads and railways), recreational areas, and publicly-accessible land. Consideration should also be given to environmental receptors such as the surrounding land, watercourses, surface and groundwater, and drinking water supplies such as wells, boreholes and water abstraction points.

¹ Environmental Impact Assessment: A guide to good practice and procedures - A consultation paper; 2006; Department for Communities and Local Government. Available from:

<http://www.communities.gov.uk/archived/publications/planningandbuilding/environmentalimpactassessment>

² DCLG guidance, 1999 <http://www.communities.gov.uk/documents/planningandbuilding/pdf/155958.pdf>

Impacts arising from construction and decommissioning

Any assessment of impacts arising from emissions due to construction and decommissioning should consider potential impacts on all receptors and describe monitoring and mitigation during these phases. Construction and decommissioning will be associated with vehicle movements and cumulative impacts should be accounted for.

We would expect the promoter to follow best practice guidance during all phases from construction to decommissioning to ensure appropriate measures are in place to mitigate any potential impact on health from emissions (point source, fugitive and traffic-related). An effective Construction Environmental Management Plan (CEMP) (and Decommissioning Environmental Management Plan (DEMP)) will help provide reassurance that activities are well managed. The promoter should ensure that there are robust mechanisms in place to respond to any complaints of traffic-related pollution, during construction, operation, and decommissioning of the facility.

Emissions to air and water

Significant impacts are unlikely to arise from installations which employ Best Available Techniques (BAT) and which meet regulatory requirements concerning emission limits and design parameters. However, PHE has a number of comments regarding emissions in order that the EIA provides a comprehensive assessment of potential impacts.

When considering a baseline (of existing environmental quality) and in the assessment and future monitoring of impacts these:

- should include appropriate screening assessments and detailed dispersion modelling where this is screened as necessary
- should encompass all pollutants which may be emitted by the installation in combination with all pollutants arising from associated development and transport, ideally these should be considered in a single holistic assessment
- should consider the construction, operational, and decommissioning phases
- should consider the typical operational emissions and emissions from start-up, shut-down, abnormal operation and accidents when assessing potential impacts and include an assessment of worst-case impacts
- should fully account for fugitive emissions

- should include appropriate estimates of background levels
- should identify cumulative and incremental impacts (i.e. assess cumulative impacts from multiple sources), including those arising from associated development, other existing and proposed development in the local area, and new vehicle movements associated with the proposed development; associated transport emissions should include consideration of non-road impacts (i.e. rail, sea, and air)
- should include consideration of local authority, Environment Agency, Defra national network, and any other local site-specific sources of monitoring data
- should compare predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as UK Air Quality Standards and Objectives and Environmental Assessment Levels)
 - If no standard or guideline value exists, the predicted exposure to humans should be estimated and compared to an appropriate health-based value (a Tolerable Daily Intake or equivalent). Further guidance is provided in Annex 1
 - This should consider all applicable routes of exposure e.g. include consideration of aspects such as the deposition of chemicals emitted to air and their uptake via ingestion
- should identify and consider impacts on residential areas and sensitive receptors (such as schools, nursing homes and healthcare facilities) in the area(s) which may be affected by emissions, this should include consideration of any new receptors arising from future development

Whilst screening of impacts using qualitative methodologies is common practice (e.g. for impacts arising from fugitive emissions such as dust), where it is possible to undertake a quantitative assessment of impacts then this should be undertaken.

PHE's view is that the EIA should appraise and describe the measures that will be used to control both point source and fugitive emissions and demonstrate that standards, guideline values or health-based values will not be exceeded due to emissions from the installation, as described above. This should include consideration of any emitted pollutants for which there are no set emission limits. When assessing the potential impact of a proposed installation on environmental quality, predicted environmental concentrations should be compared to the permitted concentrations in the affected media; this should include both standards for short and long-term exposure.

Additional points specific to emissions to air

When considering a baseline (of existing air quality) and in the assessment and future monitoring of impacts these:

- should include consideration of impacts on existing areas of poor air quality e.g. existing or proposed local authority Air Quality Management Areas (AQMAs)
- should include modelling using appropriate meteorological data (i.e. come from the nearest suitable meteorological station and include a range of years and worst case conditions)
- should include modelling taking into account local topography

Additional points specific to emissions to water

When considering a baseline (of existing water quality) and in the assessment and future monitoring of impacts these:

- should include assessment of potential impacts on human health and not focus solely on ecological impacts
- should identify and consider all routes by which emissions may lead to population exposure (e.g. surface watercourses; recreational waters; sewers; geological routes etc.)
- should assess the potential off-site effects of emissions to groundwater (e.g. on aquifers used for drinking water) and surface water (used for drinking water abstraction) in terms of the potential for population exposure
- should include consideration of potential impacts on recreational users (e.g. from fishing, canoeing etc) alongside assessment of potential exposure via drinking water

Land quality

We would expect the promoter to provide details of any hazardous contamination present on site (including ground gas) as part of the site condition report.

Emissions to and from the ground should be considered in terms of the previous history of the site and the potential of the site, once operational, to give rise to issues. Public health impacts associated with ground contamination and/or the

migration of material off-site should be assessed³ and the potential impact on nearby receptors and control and mitigation measures should be outlined.

Relevant areas outlined in the Government's Good Practice Guide for EIA include:

- effects associated with ground contamination that may already exist
- effects associated with the potential for polluting substances that are used (during construction / operation) to cause new ground contamination issues on a site, for example introducing / changing the source of contamination
- impacts associated with re-use of soils and waste soils, for example, re-use of site-sourced materials on-site or offsite, disposal of site-sourced materials offsite, importation of materials to the site, etc.

Waste

The EIA should demonstrate compliance with the waste hierarchy (e.g. with respect to re-use, recycling or recovery and disposal).

For wastes arising from the installation the EIA should consider:

- the implications and wider environmental and public health impacts of different waste disposal options
- disposal route(s) and transport method(s) and how potential impacts on public health will be mitigated

Other aspects

Within the EIA PHE would expect to see information about how the promoter would respond to accidents with potential off-site emissions e.g. flooding or fires, spills, leaks or releases off-site. Assessment of accidents should: identify all potential hazards in relation to construction, operation and decommissioning; include an assessment of the risks posed; and identify risk management measures and contingency actions that will be employed in the event of an accident in order to mitigate off-site effects.

The EIA should include consideration of the COMAH Regulations (Control of Major Accident Hazards) and the Major Accident Off-Site Emergency Plan (Management of Waste from Extractive Industries) (England and Wales) Regulations 2009: both in terms of their applicability to the installation itself, and the installation's potential to impact on, or be impacted by, any nearby installations themselves subject to the these Regulations.

³ Following the approach outlined in the section above dealing with emissions to air and water i.e. comparing predicted environmental concentrations to the applicable standard or guideline value for the affected medium (such as Soil Guideline Values)

There is evidence that, in some cases, perception of risk may have a greater impact on health than the hazard itself. A 2009 report⁴, jointly published by Liverpool John Moores University and the HPA, examined health risk perception and environmental problems using a number of case studies. As a point to consider, the report suggested: "Estimation of community anxiety and stress should be included as part of every risk or impact assessment of proposed plans that involve a potential environmental hazard. This is true even when the physical health risks may be negligible." PHE supports the inclusion of this information within EIAs as good practice.

Electromagnetic fields (EMF) [include for installations with associated substations and/or power lines]

There is a potential health impact associated with the electric and magnetic fields around substations and the connecting cables or lines. The following information provides a framework for considering the potential health impact.

In March 2004, the National Radiological Protection Board, NRPB (now part of PHE), published advice on limiting public exposure to electromagnetic fields. The advice was based on an extensive review of the science and a public consultation on its website, and recommended the adoption in the UK of the EMF exposure guidelines published by the International Commission on Non-ionizing Radiation Protection (ICNIRP):-

<http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/Publications/Radiation/NPRBArchive/DocumentsOfTheNRPB/Abisd1502/>

The ICNIRP guidelines are based on the avoidance of known adverse effects of exposure to electromagnetic fields (EMF) at frequencies up to 300 GHz (gigahertz), which includes static magnetic fields and 50 Hz electric and magnetic fields associated with electricity transmission.

PHE notes the current Government policy is that the ICNIRP guidelines are implemented in line with the terms of the EU Council Recommendation on limiting exposure of the general public (1999/519/EC):

http://webarchive.nationalarchives.gov.uk/+www.dh.gov.uk/en/PublicHealth/HealthProtection/DH_4089500

For static magnetic fields, the latest ICNIRP guidelines (2009) recommend that acute exposure of the general public should not exceed 400 mT (millitesla), for any part of the body, although the previously recommended value of 40 mT is the value used in the Council Recommendation. However, because of potential indirect adverse effects, ICNIRP recognises that practical policies need to be implemented to prevent inadvertent harmful exposure of people with implanted electronic medical devices and implants containing ferromagnetic materials, and injuries due to flying ferromagnetic objects, and these considerations can lead to much lower restrictions, such as 0.5 mT as advised by the International Electrotechnical Commission.

⁴ Available from: <http://www.cph.org.uk/showPublication.aspx?pubid=538>

At 50 Hz, the known direct effects include those of induced currents in the body on the central nervous system (CNS) and indirect effects include the risk of painful spark discharge on contact with metal objects exposed to the field. The ICNIRP guidelines give reference levels for public exposure to 50 Hz electric and magnetic fields, and these are respectively 5 kV m^{-1} (kilovolts per metre) and $100 \text{ } \mu\text{T}$ (microtesla). If people are not exposed to field strengths above these levels, direct effects on the CNS should be avoided and indirect effects such as the risk of painful spark discharge will be small. The reference levels are not in themselves limits but provide guidance for assessing compliance with the basic restrictions and reducing the risk of indirect effects. Further clarification on advice on exposure guidelines for 50 Hz electric and magnetic fields is provided in the following note on the HPA website:

http://webarchive.nationalarchives.gov.uk/20140714084352/http://www.hpa.org.uk/Topics/Radiation/UnderstandingRadiation/InformationSheets/info_IcnirpExpGuidelines/

The Department of Energy and Climate Change has also published voluntary code of practices which set out key principles for complying with the ICNIRP guidelines for the industry.

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/37447/1256-code-practice-emf-public-exp-guidelines.pdf

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/48309/1255-code-practice-optimum-phasing-power-lines.pdf

There is concern about the possible effects of long-term exposure to electromagnetic fields, including possible carcinogenic effects at levels much lower than those given in the ICNIRP guidelines. In the NRPB advice issued in 2004, it was concluded that the studies that suggest health effects, including those concerning childhood leukaemia, could not be used to derive quantitative guidance on restricting exposure. However, the results of these studies represented uncertainty in the underlying evidence base, and taken together with people's concerns, provided a basis for providing an additional recommendation for Government to consider the need for further precautionary measures, particularly with respect to the exposure of children to power frequency magnetic fields.

The Stakeholder Advisory Group on ELF EMFs (SAGE) was then set up to take this recommendation forward, explore the implications for a precautionary approach to extremely low frequency electric and magnetic fields (ELF EMFs), and to make practical recommendations to Government. In the First Interim Assessment of the Group, consideration was given to mitigation options such as the 'corridor option' near power lines, and optimal phasing to reduce electric and magnetic fields. A Second Interim Assessment addresses electricity distribution systems up to 66 kV. The SAGE reports can be found at the following link:

<http://sagedialogue.org.uk/> (go to “Document Index” and Scroll to SAGE/Formal reports with recommendations)

The Agency has given advice to Health Ministers on the First Interim Assessment of SAGE regarding precautionary approaches to ELF EMFs and specifically regarding power lines and property, wiring and electrical equipment in homes:

http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/Publications/Radiation/HPAResponseStatementsOnRadiationTopics/rpdadvice_sage/

The evidence to date suggests that in general there are no adverse effects on the health of the population of the UK caused by exposure to ELF EMFs below the guideline levels. The scientific evidence, as reviewed by PHE, supports the view that precautionary measures should address solely the possible association with childhood leukaemia and not other more speculative health effects. The measures should be proportionate in that overall benefits outweigh the fiscal and social costs, have a convincing evidence base to show that they will be successful in reducing exposure, and be effective in providing reassurance to the public.

The Government response to the First SAGE Interim Assessment is given in the written Ministerial Statement by Gillian Merron, then Minister of State, Department of Health, published on 16th October 2009:

<http://www.publications.parliament.uk/pa/cm200809/cmhansrd/cm091016/wmstext/91016m0001.htm>

http://webarchive.nationalarchives.gov.uk/20130107105354/http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_107124

HPA and Government responses to the Second Interim Assessment of SAGE are available at the following links:

http://webarchive.nationalarchives.gov.uk/20140629102627/http://www.hpa.org.uk/Publications/Radiation/HPAResponseStatementsOnRadiationTopics/rpdadvice_sage2/

http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_130703

The above information provides a framework for considering the health impact associated with the proposed development, including the direct and indirect effects of the electric and magnetic fields as indicated above.

Liaison with other stakeholders, comments should be sought from:

- the local authority for matters relating to noise, odour, vermin and dust nuisance

- the local authority regarding any site investigation and subsequent construction (and remediation) proposals to ensure that the site could not be determined as 'contaminated land' under Part 2A of the Environmental Protection Act
- the local authority regarding any impacts on existing or proposed Air Quality Management Areas
- the Food Standards Agency for matters relating to the impact on human health of pollutants deposited on land used for growing food/ crops
- the Environment Agency for matters relating to flood risk and releases with the potential to impact on surface and groundwaters
- the Environment Agency for matters relating to waste characterisation and acceptance
- the Clinical Commissioning Groups, NHS commissioning Boards and Local Planning Authority for matters relating to wider public health

Environmental Permitting

Amongst other permits and consents, the development will require an environmental permit from the Environment Agency to operate (under the Environmental Permitting (England and Wales) Regulations 2010). Therefore the installation will need to comply with the requirements of best available techniques (BAT). PHE is a consultee for bespoke environmental permit applications and will respond separately to any such consultation.

Annex 1

Human health risk assessment (chemical pollutants)

The points below are cross-cutting and should be considered when undertaking a human health risk assessment:

- The promoter should consider including Chemical Abstract Service (CAS) numbers alongside chemical names, where referenced in the ES
- Where available, the most recent United Kingdom standards for the appropriate media (e.g. air, water, and/or soil) and health-based guideline values should be used when quantifying the risk to human health from chemical pollutants. Where UK standards or guideline values are not available, those recommended by the European Union or World Health Organisation can be used
- When assessing the human health risk of a chemical emitted from a facility or operation, the background exposure to the chemical from other sources should be taken into account
- When quantitatively assessing the health risk of genotoxic and carcinogenic chemical pollutants PHE does not favour the use of mathematical models to extrapolate from high dose levels used in animal carcinogenicity studies to well below the observed region of a dose-response relationship. When only animal data are available, we recommend that the 'Margin of Exposure' (MOE) approach⁵ is used

⁵ Benford D et al. 2010. Application of the margin of exposure approach to substances in food that are genotoxic and carcinogenic. Food Chem Toxicol 48 Suppl 1: S2-24

Hannah Nelson

From: Planning Apps <planningapplications@southglos.gov.uk>
Sent: 27 January 2015 15:01
To: Environmental Services
Subject: RE: EN010034 – Avon Power Station – EIA Scoping Consultation

Categories: Green Category

Hannah,

Thank you for your email. I have forwarded it on to the relevant section within the Planning Department for you.

Kind regards,

Natalie Maggs

Business Support Assistant

Business Support Team

From: Environmental Services [<mailto:EnvironmentalServices@infrastructure.gsi.gov.uk>]
Sent: 27 January 2015 14:24
To: Planning Apps
Subject: EN010034 – Avon Power Station – EIA Scoping Consultation

Dear Sir/Madam

Please see the following hyperlink to correspondence on the proposed Avon Power Station.

http://infrastructure.planningportal.gov.uk/wp-content/uploads/2015/01/150127_EN010034_Letter-to-stat-cons_Scoping-AND-Reg-9-Notification_English.pdf

Please note the deadline for consultation responses is **Tuesday 24 February 2015**, and is a statutory requirement that cannot be extended.

Kind regards,

Hannah Nelson
EIA and Land Rights Advisor

Major Applications and Plans, The Planning Inspectorate, Temple Quay House, Temple Quay, Bristol, BS1 6PN

Direct Line: 0303 444 5061

Twitter: [@PINSGov](https://twitter.com/PINSGov)

Helpline: 0303 444 5000

Email: EnvironmentalServices@infrastructure.gsi.gov.uk

Our Reference Number : 8150041329
Your Reference Number : EN010034

PINS RECEIVED

02 FEB 2015



Wales & West House
Spooner Close
Celtic Springs
Coedkernew
Newport NP10 8FZ

www.wwutilities.co.uk

FAO:

Hannah Nelson
Planning Inspectorate
3/18 Temple Quay House
The Square
Temple Quay
Bristol
BS1 6PN

Date : 29.01.2015
Network Contact : Andrew Dickens
Telephone : 02920 278912
Fax : 0845 0720852

Dear Hannah Nelson

Re: Planning Application

Wales & West Utilities acknowledge receipt of your notice received on **27.01.2015**, advising us of the planning application and proposals at:

Avon Power Station, Central Avenue, Hallen, Bristol, BS10 7SD

We enclose an extract from our mains records of the area covered by your proposals together with a comprehensive list of General Conditions for your guidance. This plan shows only those pipes owned by Wales & West Utilities in its role as a Licensed Gas Transporter (GT). Gas pipes owned by other GT's and also privately owned pipes may be present in this area. Information with regard to such pipes should be obtained from the owners. The information shown on this plan is given without obligation, or warranty and the accuracy thereof cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc., are not shown but their presence should be anticipated. No liability of any kind whatsoever is accepted by Wales & West Utilities, its agents or servants for any error or omission.

Wales & West Utilities have no objections to these proposals, however our apparatus may be at risk during construction works and should the planning application be approved then we require the promoter of these works to contact us directly to discuss our requirements in detail. Should diversion works be required these will be fully chargeable.

Wales & West Utilities apparatus may be directly affected by these proposals and the Information you have provided has been forwarded to Asset Management for their comments. If Wales & West are affected an Engineer will then contact you direct.

Please note this is in regard only to those pipes owned by Wales & West Utilities in its role as a licensed Gas Transporter (GT). Gas pipes owned by other GT's and also privately owned may be present in this area and information with regards to such pipes should be obtained from the owners.

Please note that the plans are only valid for 28 days from the date of issue and updated plans must be requested before any work commences on site if this period has expired.

If you have any queries please contact **Andrew Dickens** on **02920 278912** who will be happy to assist you.

24 hour gas escape number
Rhif 24 awr os bydd nwy yn gollwng

0800 111 999*

*calls will be recorded and may be monitored
caiff galwadau eu recordio a gellir eu monitro



BSL200

Wales & West Utilities Limited

Registered Office:

Wales & West House, Spooner Close, Coedkernew, Newport NP10 8FZ
Registered in England and Wales: No. 5046791



Yours sincerely



Nigel Winman
Connections Manager
Wales & West Utilities

24 hour gas escape number
Rhif 24 awr os bydd nwy yn gollwng

0800 111 999*

*calls will be recorded and may be monitored
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GENERAL CONDITIONS TO BE OBSERVED FOR THE PROTECTION OF APPARATUS AND THE PREVENTION OF DISRUPTION TO GAS SUPPLIES.

General conditions affecting the design, construction or maintenance of services and/or structures or other works in the vicinity of Wales & West Utilities (WWU) plant, pipelines and associated installations:

These general conditions apply only to the gas apparatus and pipes operated by WWU. It is possible that there may be other gas transporters with apparatus in the vicinity; therefore you should ensure that you have made enquiries of them and have complied with their requirements.

1. GRAPHIC REPRESENTATION OF GAS MAINS

Any plans supplied or marked up by WWU will indicate the **APPROXIMATE** location of its apparatus. This information is provided as a general guide only; its accuracy cannot be guaranteed and is given without obligation or warranty. Service pipes are not shown but their presence should be anticipated. No liability whatsoever is accepted by WWU, its agents or servants for any error, omission, discrepancy or deviation. Plans on site should be current, i.e. no older than 28 days from the date of issue. Gas pipes owned by other Gas Transporters, or otherwise privately owned, may be present in this area (pink areas indicated on our plans). Information with regard to such pipes should be obtained from the relevant owners.

Should you require assistance on site locating WWU apparatus, please contact our Plant Protection Team on **02920 278912**.

2. METHODS OF WORKING

The following methods of work shall not normally be permitted within the limits of distance indicated (relative to the established pipe position). Any variances must have consent from WWU before works commence on site:

Mechanical Excavation	3m (1m for low pressure mains)	Hydraulic Testing	8 m
Piling / Pile removing / Boring	15m	Welding or other hot works*	15m
Directional Drill Operations	15m	Explosives	250m

* NOTE: Welding or other hot works involving naked flames shall be carried out at a safe distance to the satisfaction of a WWU Engineer. A check should be made prior to the commencement of works, to ensure a gas free atmosphere exists. It is also necessary to monitor the atmosphere at regular intervals for the duration of the works. In no case shall such activities take place in any Wales & West Utilities Easement without the written consent and in the presence of a WWU representative.

WWU must be consulted prior to carrying out any excavation work within **10m** of any above or below ground gas installations or pipeline. No excavation works may commence within **50m** of a High Pressure or Very High Pressure Pipeline unless the pipeline has been located by tracing and its precise route identified.

In addition to the above methods of working, WWU must be contacted prior to any External Wall Installation (EWI) schemes, proposed solar farms and wind turbine installations.

No work shall be undertaken near, nor heavy plant or equipment moved over, any gas pipeline or apparatus until all of the conditions specified by WWU have been complied with.

Where WWU have apparatus in the vicinity of your work, any damage to it could have serious consequences. In view of this and in the interests of safety, a meeting should be arranged before the commencement of work on site between WWU representatives, representatives of the promoting authority, the contractors and any other interested parties. At this meeting the suggested program of site works and plant safety should be discussed. It is essential that this meeting is convened well in advance of commencement on site. Access to WWU plant and facilities for inspection by WWU staff must not be affected. Where formal consent has been given, **A MINIMUM OF SEVEN DAYS NOTICE IS REQUIRED** before carrying out work in WWU easements, or the appropriate notice under the New Roads & Street Works Act (NRSWA) where existing plant is situated within the public highway.

Further guidance can also be sought from the document **HS(G)47 - Avoiding Danger from Underground Services** from the HSE website.

3. PROXIMITY OF OTHER PLANT

A minimum clearance of **600 millimetres (mm)** should be allowed between all plant being installed and an existing gas main operating above 2 bar medium pressure (MP), whether the adjacent plant is parallel to or crossing the gas pipe. For mains operating at MP or below, this distance can be reduced to 300mm. **NO APPARATUS SHOULD BE LAID OVER AND ALONG THE LINE OF A GAS PIPE, IRRESPECTIVE OF CLEARANCE.**

No manhole or chamber shall be built over or around a gas pipe and no work should be carried out which results in a reduction of cover or protection over a pipe without consultation with and the agreement of WWU staff.

24 hour gas escape number
Rhif 24 awr os bydd nwy yn gollwng

0800 111 999*

*calls will be recorded and may be monitored
caiff galwadau eu recordio a gellir eu monitro



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4. PROTECTION

Where any works cross or run in close proximity to WWU apparatus, periodic visits must be made by a WWU engineer. His requests for protection or support to the apparatus shall be immediately observed.

Suitably designed crossing points are to be constructed to the satisfaction of a WWU Engineer. These crossing points shall be clearly indicated by the erection of bunting and crossings at other places should be prevented.

Backfill material adjacent to WWU apparatus shall be soft fill or sand, containing no stones, bricks, or lumps of concrete etc., placed to a minimum 150mm around the mains and is to be well compacted by hand. No power consolidation shall take place above the main until 300mm of soft fill has been compacted by hand.

5. DAMAGE TO COATINGS

Where a gas pipe is coated with special wrapping and this is damaged, even to a minor extent, WWU must be notified so that repairs can be made to prevent future corrosion and subsequent leakage. **WHERE MINOR DAMAGE TO COATING IS REPORTED TO WWU PRIOR TO BACKFILL, THE NECESSARY REPAIR WILL BE MADE FREE OF CHARGE.**

6. CATHODIC PROTECTION

Where WWU apparatus is cathodically protected either by sacrificial anode or impressed current systems and where new apparatus is to be laid and is to be similarly protected, WWU will require to carry out interaction tests to determine whether its own system is adversely affected. The cost of any mutually agreed remedial action will be recharged to the authority installing the new apparatus. If any bond wires, test leads etc., used in connection with cathodic protection systems are damaged or found to be in poor condition, broken or disconnected, WWU must be notified prior to backfilling so that a repair can be made.

7. HOT WORKS

Even when a gas free atmosphere exists care must be taken when carrying out hot works in close proximity to gas plant in order to ensure that no damage occurs. Particular care must be taken to avoid damage by heat or naked flames to plastic gas pipes or to the protective coatings on other pipes.

8. DEMOLITION

Live gas services must be disconnected **PRIOR** to demolishing any property, arrangements must be made for WWU to check for the presence of any live gas services.

9. TREE PLANTING

WWU must be contacted prior to all tree-planting works above or near our apparatus. Further information can then be made available.

10. DEEP EXCAVATIONS

Any work involving deep excavations (1.5m or more) will be subject to the "Model Consultative Procedure for Pipeline Construction involving Deep Excavations". This may require the diversion of WWU apparatus prior to the commencement of your works. Detailed plans and cross sections will be required in order to determine the effect of these works on WWU apparatus.

11. RENEWABLE ENERGY INSTALLATIONS

Wind Turbines - WWU must be advised of any planned development of wind turbines in the vicinity of an above 2 bar gas pipelines to ensure the development does not impact on the future safe operation of the pipeline. Industry guidance states that any wind turbine must be sited no closer than 1.5 times the proposed height of the turbine mast away from the nearest edge of the pipeline.

Solar Farms - WWU must be contacted regarding planned solar farms being considered in the vicinity of WWU gas pipelines.

EWI - WWU must be contacted regarding any EWI scheme to ensure the scheme does not impact upon WWU's apparatus.

12. LEAKAGE FROM GAS MAINS OR SERVICES

If damage or leakage is caused or an escape of gas is smelt or suspected the following action should be taken at once:

- Remove all personnel from the immediate vicinity of the escape.
- Inform the 24hr Gas Emergency Service on **0800 111 999**
- Prevent any approach by the public, prohibit smoking, and extinguish all naked flames or other sources of ignition for at least 15 metres from the leakage. Do not operate any electrical switches in the vicinity of the escape.
- Assist gas personnel, Police and/or Fire Services as requested.

**IN THE EVENT OF A LEAK, OBSERVE THE ABOVE BUT DO NOT ATTEMPT TO SEAL THE LEAK
REMEMBER - IF IN DOUBT; SEEK ADVICE FROM WWU**

24 hour gas escape number
Rhif 24 awr os bydd nwy yn gollwng

0800 111 999*

*calls will be recorded and may be monitored
caiff galwadau eu recordio a gellir eu monitro



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Registered in England and Wales: No. 5046791

13. BUILDING PROXIMITIES

There are minimum proximity distances for buildings from WWU mains depending on both the operating pressure and the material of the main. Advice should be sought from WWU prior to building works taking place to confirm these distances. For High Pressure pipelines you must seek further guidance from the HSE and Local Authority Planning team regarding their PADHI distances regarding building proximities as these may be in addition to WWU proximity distances for a pipeline.

Temporary buildings should not be placed above any gas pipe or within 3.0 metres of mains operating above 75mbar (medium, intermediate and high pressure mains) during construction activities and in no circumstances should permanent structures be built over any pipe transporting gas.

14. SITE RESPONSIBILITIES

All costs incurred by WWU for the repair of direct or consequential damage to gas plant will be rechargeable (with the exception of paragraph 5). WWU reserves the right to divert any affected apparatus or alternatively specify suitable protection of its apparatus. If proved necessary during the course of site works, the cost of which will be chargeable.

The above requirements do not relieve you of the responsibility of taking all precautions necessary to safeguard the Company's plant and to avoid risk to persons and property. The persons for whom the works are being undertaken, their servants, agents and contractors shall indemnify WWU servants, agents and contractors against any loss, damage, expenses, claims and actions incurred or brought against Wales & West Utilities, its servants, agents and contractors in consequence of the provision of these works and activities associated therewith or ancillary thereto.

KEY TO MAPS

LP	Low Pressure	CI	Cast Iron
MP	Medium Pressure	SI	Spun Iron
IP	Intermediate Pressure	DI	Ductile Iron
HP	High Pressure	PE	Polyethylene
		ST	Steel

24 hour gas escape number
Rhif 24 awr os bydd nwy yn gollwng

0800 111 999*

*calls will be recorded and may be monitored
caiff galwadau eu recordio a gellir eu monitro



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ADDITIONAL GENERAL CONDITIONS FOR WORKING IN THE VICINITY OF GAS MEDIUM PRESSURE PIPES/APPARATUS

Planning the Work

1. **Current** gas plans, i.e. no older than 28 days from the date of issue, must be available to relevant personnel on site prior to work starting.
2. Use other signs to assist identification of the presence of gas apparatus, such as valve boxes, meter boxes, above ground gas installations and marker posts.
3. Refer to the "General Conditions to be observed for the Protection of Apparatus and the Prevention of Disruption to Gas Supplies" for instructions relating to work in the vicinity of Wales & West Utilities' ("WWU") plant.
4. Your method of work must incorporate any guidance provided by WWU or its representatives.
5. You should appoint suitably competent operatives to locate and mark the position of underground gas apparatus in accordance with this document and advice provided by WWU.
6. Ensure you have and make use of the contact details of a local WWU Plant Protection representative.

Gas plans show only those pipes owned by WWU. Service pipes, valves, siphons, stub connections, etc. may not be shown but their presence should be anticipated.

Before Starting Work

1. Contact the WWU Plant Protection on 02920 278912 to determine if a site visit is required.
2. Pipe locating equipment **must** be used in all modes in conjunction with the gas plans.
3. Signals received must be marked by your operatives on the ground well beyond the proposed work area.
4. Brief all persons on site regarding the location of gas pipes and the precautions necessary. Ensure that rebriefing takes place with changes of personnel (e.g. shift change).

When Starting Work

1. Hand dig trial holes to confirm the position and depth of gas pipes within the affected area prior to any mechanical excavation.
2. Mechanical excavation must not be used within any exclusion zones marked around WWU apparatus. Hand held power tools must **not** be used within 500mm of the confirmed position.
3. When hand digging within 500mm of gas pipes, spades and shovels should be used. Picks, forks and pins must **not** be used.
4. Bars may only be used as a lever to loosen large rocks.
5. Repeat the use of pipe locating equipment as excavation progresses.
6. Do not use gas pipes as a step. Support long spans (<3m) and protect them from falling objects.
7. When backfilling, surround gas pipes with fine backfill. Compaction with hand tools to 300mm above the pipe must take place before using mechanical vibratory equipment (NRSWA CoP)
8. During excavation appropriate PPE must be worn.
9. WWU operates gas pipes/apparatus at different pressure regimes. Unless advice specific to your works is provided by WWU to the contrary, all gas pipes/apparatus shall be treated in accordance with this document.

If the above controls cannot be implemented, immediate guidance must be sought from WWU. Contact your local WWU engineer or the Plant Protection Team on 02920 278912.

Gas escapes / Damage to Gas Pipes

If an escape of gas has taken place or is suspected, immediately remove all personnel from the immediate vicinity of the escape, inform the **24hr GAS EMERGENCY SERVICE on 0800 111999**, prevent any approach by the public, extinguish all naked flames or other sources of ignition for at least 15 metres from the escape.

Any instances of damage to gas pipes or apparatus should be reported immediately to WWU. Although no immediate gas escape has occurred, the damage may allow a later escape of gas to take place. Additionally, minor damage to gas pipes or apparatus that is not dealt with immediately by WWU may result in a later failure of the plant.

IF IN DOUBT, CONTACT THE PLANT PROTECTION TEAM ON 02920 278912

24 hour gas escape number
Rhif 24 awr os bydd nwy yn gollwng

0800 111 999*

*calls will be recorded and may be monitored
caiff galwadau eu recordio a gellir eu monitro



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WW/SP/SSW/22

SPECIFICATION FOR

**SAFE WORKING IN THE VICINITY OF PIPELINES AND
ASSOCIATED INSTALLATIONS OPERATING ABOVE 2
BARG - REQUIREMENTS FOR THIRD PARTIES**

JUNE 2013

(Rev 04/13)

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FOREWORD

This Specification was approved, by Chris Clarke, Director of Asset Management and HS&E Dept on 21st June 2013 for use by managers, engineers and supervisors throughout Wales & West Utilities Limited.

Documents are revised, when necessary, by the issue of new editions. Users should ensure that they are in possession of the latest edition by referring to the document library available on the company intranet.

Compliance with this document does not confer immunity from prosecution for breach of statutory or other legal obligations.

BRIEF HISTORY

First published as T/SP/SSW22	October 2001	EPSG/L01/283
Editorial update to reflect merger October 2002	November 2002	
Revised and reissued.	November 2003	EPSG/A03/10125
Revised and Reissued as T/SP/SSW/22	June 2004	EPSG/T04/1209
Editorial update to comply with GRM	August 2004	
Document revised to remove reference to Transco and replace with WWU Ltd.	May 2006	
Document revised to reflect WWU management structure, include IP pipelines and update letters.	April 2013	

KEY CHANGES (Identify the changes from the previous version of this document)

Section	Amendments
1	scope extended from any pipe operating above 7bar to above 2bar gauge
5 & 6	References added to T/PR/P/18
8	References added to wind turbine development near pipelines

USE

This document is provided by Wales & West Utilities Limited for information and reference.

MANDATORY AND NON-MANDATORY REQUIREMENTS

In this document:

must: indicates a mandatory requirement.

should: indicates best practice and is the preferred option. If an alternative method is used then a suitable and sufficient risk assessment must be completed to show that the alternative method delivers the same, or better, level of protection.

(Rev 04/13)

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SPECIFICATION FOR

SAFE WORKING AND DEVELOPMENT IN THE VICINITY OF PIPELINES AND ASSOCIATED INSTALLATIONS OPERATING ABOVE 2 BARG - REQUIREMENTS FOR THIRD PARTIES

INTRODUCTION

This specification is for issue to third parties carrying out work in the vicinity of high pressure gas pipelines (above 2 bar gauge) and associated installations and is provided to ensure that individuals planning and undertaking work take appropriate measures to prevent damage.

Any damage to a high-pressure gas pipeline or its coating can affect its integrity and can result in failure of the pipeline with potential serious hazardous consequences for individuals located in the vicinity of the pipeline if it were to fail. It is therefore essential that the procedures outlined in this document are complied with when working near to a high pressure, above 2 bar gauge, pipeline. If any work is considered by Wales & West Utilities to be in breach of the requirements stipulated in this document then the Wales & West Utilities responsible person will suspend the work until the non-compliances have been rectified.

The Pipelines Safety Regulations state that "No person shall cause such damage to a pipeline as may give rise to a danger to persons" (Regulation 15). Failing to comply with these requirements could therefore also result in prosecution by the Health and Safety Executive (HSE).

The requirements in this document are in line with the requirements of the IGE (Institution of Gas Engineers) recommendations IGE/SR/18 Edition 2 - Safe Working Practices To Ensure The Integrity Of Gas Pipelines And Associated Installations and the HSE's guidance document HS(G)47 Avoiding Danger from Underground Services.

It is the responsibility of the third party to ensure that any work carried out also conforms with the requirements of the Construction and Design Management Regulations and all other relevant health and safety legislation.

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**WHEN CARRYING OUT WORK IN THE VICINITY OF A HIGH PRESSURE PIPELINE
FOLLOW THE FOLLOWING PROCESS**

CONTACT WALES & WEST UTILITIES

Contact Wales & West Utilities to obtain formal consent - Section 2 of this document.
Note: at least 7 days notice prior to commencement of the work is normally required



CONSIDER SAFETY

Consider the safety requirements - Section 3 of this document



INFORM WALES & WEST UTILITIES AND REQUEST PIPELINE LOCATION

Inform Wales & West Utilities prior to carrying out work and arrange for Wales & West Utilities to locate the pipeline - Section 4 of this document
Note: at least 7 days notice is normally required



OBSERVE RESTRICTIONS

Observe Wales & West Utilities restrictions on the allowed proximity of mechanical excavators and other power tools and the measures to protect the pipeline from construction vehicles when carrying out the work - Sections 5, 6 and 7 of this document.
Note: Wales & West Utilities may wish to supervise the work, consult Wales & West Utilities to confirm whether or not this is the case.

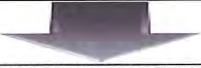


SPECIFIC ACTIVITIES

If work involves any of the following activities:

No Dig Techniques	Hot Work	Landfilling
Increase In Cover	Blasting	Pressure Testing
Piling	Surface Mineral Extraction	Seismic Surveys
Demolition	Deep Mining	Wind Turbines

Comply with the requirements in Section 8 of this document



CONSULT WALES & WEST UTILITIES

Consult Wales & West Utilities prior to any backfilling over, alongside or under the pipeline and obtain Wales & West Utilities agreement to proceed. Normally Wales & West Utilities require 48 hours notice prior to backfilling - Section 9 of this document.

IMPORTANT: This flowchart should be used in conjunction with the entire SSW22 document and not in isolation, AND If at any time during the works the pipeline is damaged even slightly then observe the precautions in Section 10 of this document

IF IN DOUBT CONTACT Wales & West Utilities

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1. SCOPE

This specification sets out the safety precautions and other conditions affecting the design, construction and maintenance of services, structures and other works in the vicinity of Wales & West Utilities pipelines and associated installations operating at pressures greater than 2 bar gauge, located in both negotiated easements (see Section 12), in public highways and within the wider area of interest around a pipeline.

2. FORMAL CONSENT

High pressure pipelines are generally laid across country within an easement agreed with the landowner or within the highway. As the required arrangements for working within an easement and working within the highway differ, this document has been structured to highlight the specific requirements for these two types of area where work may be carried out.

Generally, normal agricultural activities are not considered to affect the integrity of the pipeline, however consult Wales & West Utilities prior to undertaking deep cultivation in excess of 0.5m.

In all other cases no work shall be undertaken in the vicinity of the pipeline without the formal written consent of Wales & West Utilities.

Any documents, handed to contractors on site by Wales & West Utilities must be signed for by the site manager. Wales & West Utilities will record a list of these documents using the form in Appendix A, and the contractor should maintain a duplicate list.

2.1 Within an Easement

The promoter of any works (see Section 12) within an easement must provide Wales & West Utilities with details of the proposed works including a method statement of how the work is intended to be carried out.

Work must not go ahead until formal written consent has been given by Wales & West Utilities. This will include details of Wales & West Utilities protection requirements, contact telephone numbers and the emergency telephone number.

On acceptance of Wales & West Utilities requirements the promoter of the works must give Wales & West Utilities 7 working days' notice, or shorter only if agreed with Wales & West Utilities, before commencing work on site.

2.2 Within the Highway

Work must be notified to Wales & West Utilities in accordance with the requirements of The New Roads and Street Works Act (NRSWA) and HS(G)47.

The promoter of any works within the highway should provide Wales & West Utilities with details of the proposed works including a method statement of how the work is intended to be carried out. This should be submitted 7 working days before the planned work is to be carried out or shorter, only if agreed with Wales & West Utilities. If similar works are being carried out at a number of locations in close proximity a single method statement should be adequate.

Work should not go ahead until formal written consent has been given by Wales & West Utilities. This will include details of Wales & West Utilities' protection requirements, contact telephone numbers and the emergency telephone number.

2.3 Within the Area of Interest

Certain other activities, such as the development of adjacent land with buildings, or other constructions which may have an impact on the safe operation of above 2 bar gauge pipelines, must also be notified to Wales & West Utilities, for example the construction of wind turbines, masts or aerials.

Developers should ensure early consultation with Wales & West Utilities in respect of such development, rather than relying on local authority planning consultation, which may lead to substantial late changes to design or constraints on the planned development.

3. HS&E CONSIDERATIONS

3.1 Safe Control of Operations

All working practices must be agreed by Wales & West Utilities prior to work commencing. All personnel working on site must be made aware of the potential hazard of the pipeline and the actions they should follow in case of an emergency. The Site Document Control Form (Appendix A) should be used to record the list of relevant documents that have been provided by Wales & West Utilities to the contractor.

3.2 Deep Excavations

Special consideration should be given to the hazards associated with deep excavations. The HSE document CIS08 'Safety in Excavations' provides further guidance and is available on the HSE web site www.hse.gov.uk

3.3 Positioning of Plant

Mechanical excavators must not be sited or moved above the pipeline unless written authority has been given by the Wales & West Utilities responsible person.

Mechanical excavators must not dig on one side of the pipeline with the cab of the excavator positioned on the other side.

Mechanical excavators and other traffic must be positioned far enough away from the pipeline trench to prevent trench wall collapse.

3.4 General

Activities associated with working in the vicinity of pipelines operating above 2 bar gauge may have impact on the safety of the general public, Wales & West Utilities staff and contractors, and may affect the local environment. Contractors must carry out suitable and adequate risk assessments prior to the commencement of work to ensure that all such issues are properly considered and risks mitigated.

4. PIPELINE LOCATING

The third party should give 7 working days' notice (or shorter as agreed with Wales & West Utilities) to ensure that the pipeline is suitably located and marked out by Wales & West Utilities prior to the work commencing.

Prior to work commencing on site the pipeline must be located and pegged or suitably marked out by Wales & West Utilities personnel. In exceptional circumstances with the prior agreement of Wales & West Utilities the locating and marking out of the pipeline could be carried out by competent third parties on behalf of the contractor as long as Wales & West Utilities is assured of their competence and the procedures to be followed.

Safe digging practices, in accordance with HSE publication HS(G)47 should be followed as both direct and consequential damage to gas plant can be dangerous both to employees and to the general public.

Previously agreed working practices should be reviewed and revised based on current site conditions. Any changes must be agreed by the Wales & West Utilities responsible person.

The requirements for trial holes to locate the pipeline or determine levels at crossing points must be determined on site by the Wales & West Utilities responsible person. The excavation of all trial holes must be supervised by the Wales & West Utilities responsible person.

5. SLABBING AND OTHER PROTECTIVE MEASURES

No protective measures including the installation of concrete slab protection should be installed over or near to the Wales & West Utilities pipeline without the prior permission of Wales & West Utilities. Wales & West Utilities will need to agree the material, the dimensions and method of installation of the proposed protective measure. The method of installation must be confirmed through the submission of a formal written method statement from the contractor to Wales & West Utilities.

Where permanent slab protection is to be applied over the pipeline Wales & West Utilities should carry out a survey (Pearson or DCVG Survey) of the pipeline to check that there is no existing damage to the coating of the pipeline prior to the slab protection being put in place. In addition the pipeline records should be consulted to determine whether any other investigations or remedial works would be needed in advance of the slab construction, e.g. reference to T/PR/P/18. Wales & West Utilities must therefore be contacted prior to the laying of any slab protection to arrange this survey. The Safety precautions detailed in Sections 3 and 6 of this document should also be observed during the installation of the pipeline protection.

6. EXCAVATION

6.1 In Proximity to a Pipeline in an Easement

Third parties must not excavate unsupervised, with a powered mechanical excavator closer than 3 metres to the Wales & West Utilities located pipeline or with hand held power tools closer than 1.5 metres. Any fitting, attachment or connecting pipework on the pipeline must be exposed by hand. All other excavation must be by hand.

Consideration may be given to a relaxation of these limits by agreement with the Wales & West Utilities responsible person on site and only whilst he remains on site. In this case a powered mechanical excavator must not be allowed to excavate closer than 0.6 metres to the nearest part of the pipeline.

Where sufficient depth of cover exists, following evidence from hand dug trial holes, light tracked vehicles may be permitted to strip topsoil to a depth of 0.25 metres, using a toothless bucket.

No topsoil or other materials should be stored within the easement without the written permission of Wales & West Utilities.

No topsoil or materials should be stored over the pipeline.

No fires should be allowed in the easement strip or close to above ground gas installations.

After the completion of the work the level of cover over the pipeline should be the same as that prior to work commencing unless agreed otherwise with the Wales & West Utilities responsible person.

No new service shall be laid parallel to the pipeline within the easement. In special circumstances, and only with formal written agreement from Wales & West Utilities, this may be relaxed for short excursions where the service shall be laid no closer than 600 mm to the side of the pipeline.

Where work is being carried out parallel to the pipeline within or just alongside the easement a post and wire fence must be erected as a protective barrier between the works and the pipeline.

6.2 In Proximity to a Pipeline in the Highway

Removal of the bituminous or concrete highway surface layer by mechanical means is permitted to depth of 300 mm, although the use of chain trenchers to do this shall not be permitted within 3 metres of the pipeline. The Wales & West Utilities responsible person may want to monitor this work.

Where the bituminous or concrete highway surface layer extends below 0.3 metres deep it should only be removed by handheld power assisted tools under the supervision of the Wales & West Utilities responsible person. In exceptional circumstances, and following a risk assessment, these conditions may be relaxed by the Wales & West Utilities responsible person.

Third parties should not excavate, unsupervised, with a powered mechanical excavator closer than 3 metres to the located Wales & West Utilities pipeline or with hand held power tools closer than 1.5 metres. Any fitting or attachment must be exposed by hand.

In special circumstances consideration may be given to a relaxation of these rules by agreement with the Wales & West Utilities responsible person on site and only whilst he remains on site only whilst he remains on site and only whilst he remains on site to supervise this work..

The use of 'No dig' techniques is covered in Section 8.1.

Any new service running parallel to the pipeline should be laid no closer than 600 mm to the pipeline (see Section 6.4).

6.3 Crossing Over a Pipeline

Where a new service is to cross over the pipeline a clearance distance of 600 mm between the crown of the pipeline and underside of the service must be maintained. If this cannot be achieved the service must cross below the pipeline with a clearance distance of 600 mm.

In special circumstances this distance may be reduced at the discretion of the Wales & West Utilities responsible person on site.

6.4 Crossing Below a Pipeline

Where a service is to cross below the pipeline a clearance distance of 600 mm between the crown of the service and underside of the pipeline should be maintained.

The exposed pipeline must be suitably supported. The Wales & West Utilities responsible person must be consulted and a stress analysis may be required in order to establish support requirements. The stress analysis should be carried out by individuals with demonstrated expertise in this area, Wales & West Utilities can be consulted for advice on suitable specialists. Wales & West Utilities may request a copy of the stress analysis to confirm its adequacy.

Specific additional constraints apply to Wales & West Utilities pipelines that fall under the requirements of T/PR/P/18.

All supports must be removed prior to backfilling.

The exposed pipelines must be protected by matting and suitable timber cladding.

6.5 Cathodic Protection

Cathodic Protection is applied to all of Wales & West Utilities above 2 bar gauge buried steel pipelines and is a method of protecting pipelines with damaged coatings from corrosion by maintaining an electrical potential difference between the pipeline and anodes placed at strategic points along the pipeline.

Where a new service is to be laid and similarly protected, Wales & West Utilities will undertake interference tests to determine whether the new service is interfering with the cathodic protection of the Wales & West Utilities pipeline.

Should any cathodic protection posts or associated apparatus need moving to facilitate third party works reasonable notice, typically 7 days, should be given to Wales & West Utilities. Wales & West Utilities will undertake this work and any associated costs will be borne by the third party.

7. CONSTRUCTION TRAFFIC

Where existing roads cannot be used construction traffic should ONLY cross the pipeline at previously agreed locations. All crossing points will be fenced on both sides with a post and wire fence and with the fence returned along the easement for a distance of 6 metres. The pipeline shall be protected at the crossing points by temporary rafts of either sleeper or reinforced concrete construction, constructed at ground level. The Wales & West Utilities responsible person will review ground conditions, vehicle types and crossing frequencies to determine the type and construction of the raft required.

Notices directing traffic to the crossing points should be erected.

8. SPECIFIC ACTIVITIES

This section details the precautions that need to be taken when carrying out certain prescribed activities in the vicinity of the pipeline. Consult Wales & West Utilities if you are intending to undertake one of the listed prescribed activities and/or you require further advice on whether the work that you are intending to undertake has the potential to affect the pipeline.

8.1 No-Dig Techniques

Where the contractor intends using no dig techniques then a formal method statement must be produced for all work that would encroach (either above or below ground) within the pipeline easement. This method statement must be formally agreed with Wales & West Utilities prior to the commencement of the work. Wales & West Utilities may wish to be present when the work is being carried out and must therefore be given adequate advance notice before the commencement of the work.

8.2 Increase in Cover

A pipeline integrity assessment must be provided for situations involving a final cover depth exceeding 2.5 metres. This assessment should take due account of both soil 'dead' loading and ground settlement due to earthworks. Embankment design and construction over pipelines must give consideration to prevention of any instability. Expert advice may need to be sought which can be arranged through Wales & West Utilities.

8.3 Piling

No piling will be allowed within 15 metres of a pipeline without an assessment of the vibration levels at the pipeline. The peak particle velocity at the pipeline should be limited to a maximum level of 75 mm/sec. In any event the ground vibration shall be monitored by the contractor and the results available to the Wales & West Utilities Responsible person at their request. A typical monitoring device would be the Vibrock V801 seismograph and tri-axial geophone sensor.

Where ground conditions are of submerged granular deposits of silt and sand, an assessment of the effect of vibration on settlement and liquefaction at the pipeline shall be made.

Expert advice may need to be sought which can be arranged through Wales & West Utilities.

8.4 Demolition

No demolition should be allowed within 150 metres of a pipeline without an assessment of the vibration levels at the pipeline. The peak particle velocity at the pipeline must be limited to a maximum level of 75 mm/sec. In any event the ground vibration shall be monitored by the contractor and the results available to the Wales & West Utilities Responsible person at their request.

Where ground conditions are submerged granular deposits of silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the pipeline shall be made.

Expert advice may need to be sought which can be arranged through Wales & West Utilities.

8.5 Blasting

No blasting should be allowed within 250 metres of a pipeline without an assessment of the vibration levels at the pipeline. The peak particle velocity at the pipeline must be limited to a maximum level of 75 mm/sec. In any event the ground vibration must be monitored by the contractor and the results available to the Wales & West Utilities Responsible person at their request.

Where ground conditions are of submerged granular deposits of silt or sand, an assessment of the effect of vibration on settlement and liquefaction at the pipeline shall be made.

Expert advice may need to be sought which can be arranged through Wales & West Utilities.

8.6 Surface Mineral Extraction

An assessment must be carried out on the effect of surface mineral extraction activity within 100 metres of a pipeline. Consideration should also be given to extraction around groundbeds and other pipeline associated plant and equipment.

Where the mineral extraction extends up to the pipeline easement, a stable slope angle and stand-off distance between the pipeline and slope crest must be determined by Wales & West Utilities. The easement strip should be clearly marked by a suitable permanent boundary such as a post and wire fence, and where appropriate, slope indicator markers shall be erected to facilitate the verification of the recommended slope angle as the slope is formed, by the contractor. The pipeline easement and slope needs to be inspected periodically to identify any signs of developing instability. This may include any change of slope profile including bulging, the development of tension cracks on the slope or easement, or any changes in drainage around the slope. The results of each inspection should be recorded.

Where surface mineral extraction activities are planned within 100 metres of the pipeline but do not extend up to the pipeline easement boundary, an assessment, by Wales & West Utilities must be made on whether the planned activity could promote instability in the vicinity of the pipeline. This may occur where the pipeline is routed across a natural slope or the excavation is deep. A significant cause of this problem is where the groundwater profile is affected by changes in drainage or the development of lagoons.

Where the extraction technique involves explosives the provisions of section 8.5 apply.

8.7 Deep Mining

Pipelines routed within 1 km of active deep mining may be affected by subsidence resulting from mineral extraction. The determination of protective or remedial measures will normally require expert assistance, which can be arranged through Wales & West Utilities

8.8 Landfilling

The creation of slopes outside of the pipeline easements may promote instability within the vicinity of the pipeline. An assessment should therefore be carried out, by Wales & West Utilities, on the effect of any landfilling activity within 100 metres of a pipeline. The assessment is particularly important if landfilling operations are taking place on a slope in which the pipeline is routed.

8.9 Pressure Testing

Hydraulic pressure testing will not be permitted within 8 metres of the pipeline unless suitable precautions have been taken against the effects of a burst. These precautions should include limiting of the design factor to 0.3 for the third party pipeline for a distance of 6 metres either side of the Wales & West Utilities pipeline, and the use of mill tested pipe or sleeving.

8.10 Seismic Surveys

Wales & West Utilities must be advised of any seismic surveying work in the vicinity of pipeline that will result in Wales & West Utilities' pipeline being subjected to peak particle velocities in excess of 50 mm/sec. In any event the ground vibration near to the pipeline shall also be monitored by the contractor whilst the survey work is being carried out.

Where the peak particle velocity is predicted to exceed 50 mm/sec, the ground vibration should be monitored by the contractor and the results available to the Wales & West Utilities Responsible person at their request.

8.11 Hot Work

The Wales & West Utilities responsible person on site should supervise all welding, burning or other 'hot work' that takes place within the easement.

8.12 Wind Turbines

Wales & West Utilities must be advised of any planned development of wind turbines in the vicinity of an above 2 bar gas pipelines to ensure the development does not impact on the future safe operation of the pipeline. Industry guidance states that any wind turbine must be sited no closer than 1.5 times the proposed height of the turbine mast away from the nearest edge of the pipeline.

9. BACKFILLING

Third parties must provide Wales & West Utilities with 7 days' notice, or shorter notice only if agreed with Wales & West Utilities, of the intent to backfill over, under or alongside the pipeline. This requirement should also apply to any backfilling operations alongside the pipeline within 3 metres of the pipeline. Any damage to the pipeline or coating must be reported to the Wales & West Utilities responsible person in order that damage can be assessed and repairs can be carried out.

Minor damage to pipe coating and damage to test leads will normally be repaired by Wales & West Utilities free of charge.

No backfilling should be undertaken without Wales & West Utilities agreement to proceed. When backfilling, the pipeline should be surrounded by at least 300mm of soft fill (i.e. stone dust) containing no stones, bricks, lumps of concrete, etc. The Wales & West Utilities responsible person will stipulate the necessary consolidation requirements.

If the pipeline has been backfilled without the knowledge of the Wales & West Utilities responsible person then he will require the material to be re-excavated in order to enable the condition of the pipeline coating to be confirmed.

10. ACTION IN THE CASE OF DAMAGE TO THE PIPELINE

If the Wales & West Utilities pipeline is damaged, even slightly, and even if no gas leak has occurred then the following precautions must be taken immediately:-

- .. Shut down all plant and machinery and extinguish any potential sources of ignition.
- .. Evacuate all personnel from the vicinity of the pipeline.
- .. Notify Wales & West Utilities using the free 24 hour emergency telephone number
0800 111 999*1
- .. Notify the Wales & West Utilities responsible person or his office immediately using the contact telephone number provided.
- .. Ensure no one approaches the pipeline.
- .. Do not try to stop any leaking gas.

1 * All calls are recorded and may be monitored

11. REFERENCES

NRSWA	New Roads & Street Works Act
HS(G)47	Avoiding Danger from Underground Services
IGE/SR/18	Safe Working Practices to Ensure the Integrity of Gas Pipelines and Associated Installations
T/PR/P/18	Working on Pipelines Containing Defective Girth Welds or Girth Welds of Unknown Quality
CIS08	Safety in Excavations (HSE document)

12. GLOSSARY OF TERMS

Contractor:	the person, firm or company with whom Wales & West Utilities enters into a contract to which this specification applies, including the Contractor's personal representatives, successors and permitted assigns.
Easement:	Easements are negotiated legal entitlements between Wales & West Utilities and landowner and allow Wales & West Utilities to lay, operate and maintain pipelines within the easement strip. Easement strips may vary in width typically between 6 and 25 metres depending on the diameter and pressure of the pipeline. Consult Wales & West Utilities for details of the extent of the easement strip where work is intended.
Liquefaction:	Liquefaction is a phenomenon in which the strength and stiffness of the soil is reduced by earthquake shaking or other rapid loading. Liquefaction occurs in saturated soils, that is, soils in which the space between individual particles is completely filled with water. When liquefaction occurs, the strength of the soil decreases and the ability of the soil to support pipelines or other components is reduced.
Pearson Survey:	a survey used for locating coating defects on buried pipeline services.
DCVG Survey:	Direct Current Voltage Gradient, a survey for locating and grading coating defects on buried pipeline service
Promoter of new works:	the person or persons, firm, company or authority for whom new services, structures or other works in the vicinity of existing Wales & West Utilities pipelines and associated installations operating above 7 bar gauge are being undertaken.
Wales & West Utilities responsible person:	the person or persons appointed by Wales & West Utilities with the competencies required to act as the Wales & West Utilities representative for the purpose of the managing the particular activity.
Wayleave:	general term which is considered equivalent to 'easement' in this document.

APPENDIX A

SITE DOCUMENT CONTROL FORM - SAMPLE

Emergency Telephone No. 0800 111 999*
Plant Protection Telephone No. 02920278912
<u>SITE DOCUMENT CONTROL FORM</u>
Activity Reference:
Activity Location:
Site Manager: <i>(name & telephone number)</i>
Wales & West Utilities Contact: <i>(name & telephone number)</i>
The following documents were issued to <i>(individual's name)</i> of <i>(company name and address)</i> by <i>(Wales & West Utilities representative)</i> on <i>(date)</i> :-
Documents:- <i>(List of documents)</i>
Signed : <i>(by the recipient)</i> Date of signature :

(Rev 04/13)

APPENDIX A

SITE DOCUMENT CONTROL FORM - SAMPLE

Emergency Telephone No.	0800 111 999*
Plant Protection Telephone No.	02920278912

<u>SITE DOCUMENT CONTROL FORM</u>
--

Activity Reference:

Activity Location:

Site Manager: <i>(name & telephone number)</i>
--

Wales & West Utilities Contact: <i>(name & telephone number)</i>
--

The following documents were issued to *(individual's name)***of** *(company name and address)*.....**by** *(Wales & West Utilities representative)*.....**on** *(date)*.....:-

Documents:-

Signed :

Date of signature :

ENDNOTE**Comments**

Comments and queries regarding the technical content of this document should be directed to:

Asset Management & HSE Dept
Wales & West Utilities Ltd
Wales & West House
Spooner Close
Celtic Springs
Coedkernew
NEWPORT
NP10 8FZ

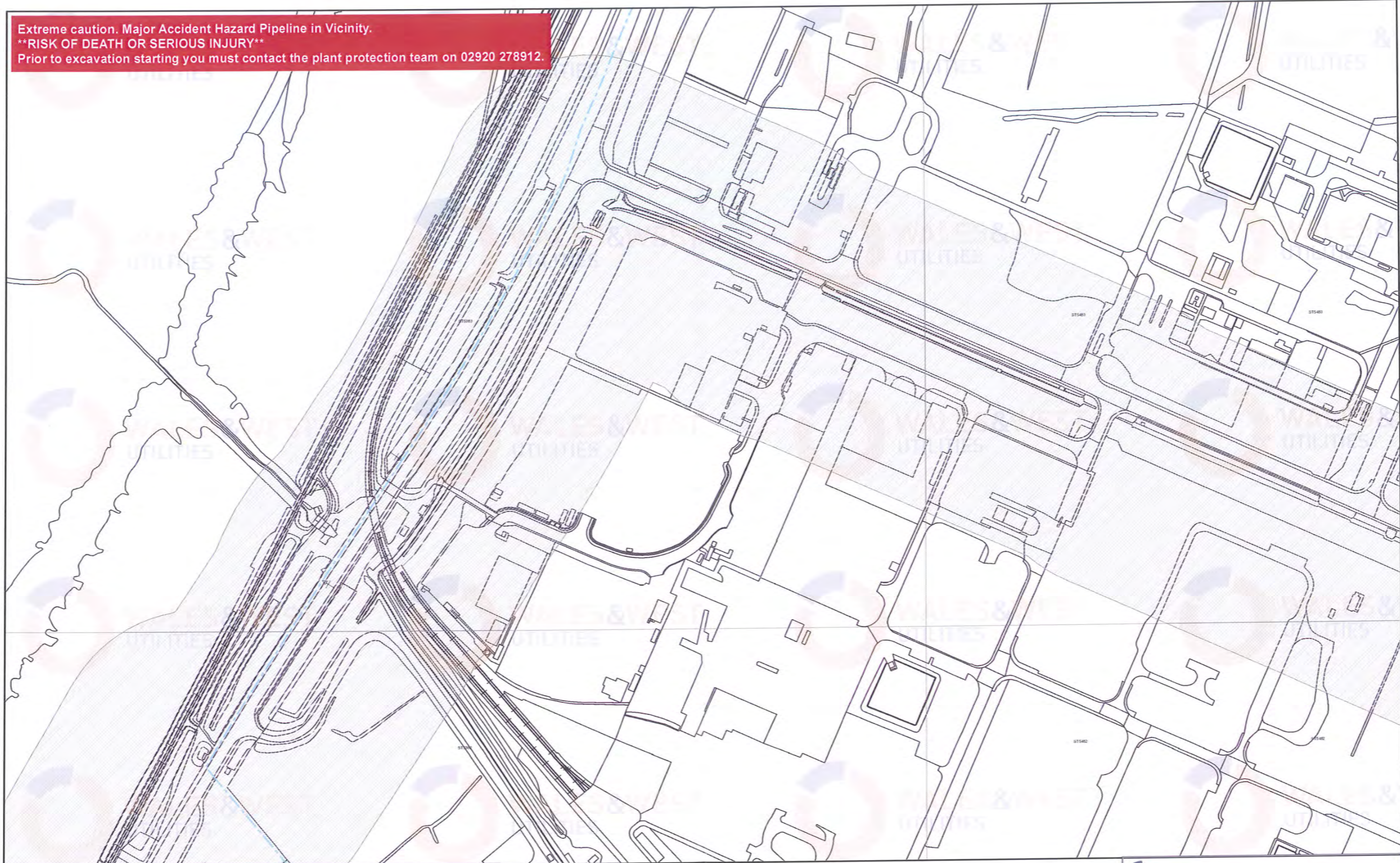
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(Rev 04/13)

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Extreme caution. Major Accident Hazard Pipeline in Vicinity.
****RISK OF DEATH OR SERIOUS INJURY****
 Prior to excavation starting you must contact the plant protection team on 02920 278912.



Scale	1 : 2500@A3
User ID	Andrew.R.Dickens
Date	29/01/2015
Grid Ref:	Easting: 353843 Northing: 183135
NRSWA Response	

— Low Pressure
- - - Medium Pressure
- · - · - Intermediate Pressure
- · - · - High Pressure

IGT/Other Polygon
 Contact Zones
 NTS Pipeline

0 65 130
 Meters

Some examples of Pipe Items:
 Valve Depth of Cover Syphon Diameter Change Material Change

TITLE:

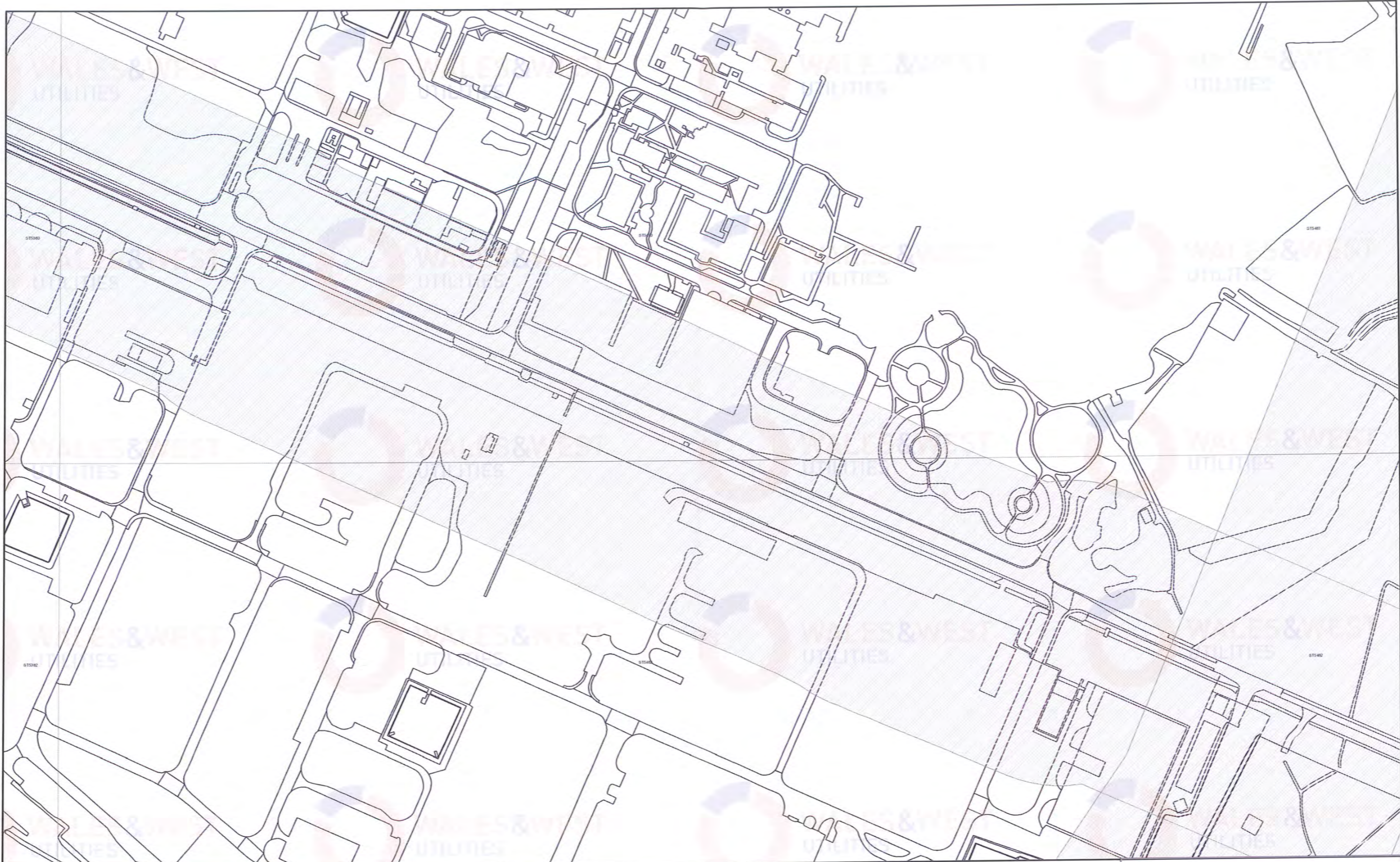
The plan shows those pipes owned by Wales & West Utilities (WU) in its role as a Licensed Gas Transporter (GT). The information shown on this plan is derived from historic information and may have involved re-scaling plans, and the accuracy of it cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. may not be shown but their presence should be anticipated. No warranties are therefore given in respect of it. WU its employees and contractors do not accept any liability for any inaccuracy or incompleteness in it.

You must use safe digging practices, in accordance with HS(G)47, to establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you or near gas apparatus. The information shown on this plan should not be used beyond 28 days from the date of issue of this plan as it is subject to updating.

The plan also provides indications of gas pipes owned by other GTs, or otherwise privately owned, which may be present in this area. This information is not information of WU and WU is unable to verify this information or to confirm whether it is accurate or complete. It is supplied voluntarily to assist the user in determining whether to make contact with other GTs or others. The user must obtain such information from the other GT or person concerned. WU, its employees and contractors do not accept any liability for this information or any inaccuracy or incompleteness in it.

Wales & West Utilities
 Wales and West Utilities Ltd., Wales and West House, Spooner Close, Celtic Springs, Coedkernew, Newport, NP10 8FZ

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Scale	1 : 2500@A3
User ID	Andrew.R.Dickens
Date	29/01/2015
Grid Ref:	Easting: 354453 Northing: 183017
NRSA Response	

Low Pressure	IGT/Other Polygon
Medium Pressure	Contact Zones
Intermediate Pressure	NTS Pipeline
High Pressure	

Some examples of Plant Items:

Valve	Depth of Cover	Syphon	Diameter Change	Material Change
-------	----------------	--------	-----------------	-----------------

TITLE:

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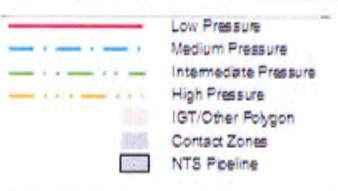
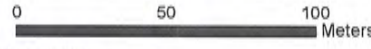





WALES & WEST UTILITIES

Wales and West Utilities Ltd., Wales and West House, Spooner Close, Celtic Springs, Coedkernew, Newport, NP10 8FZ

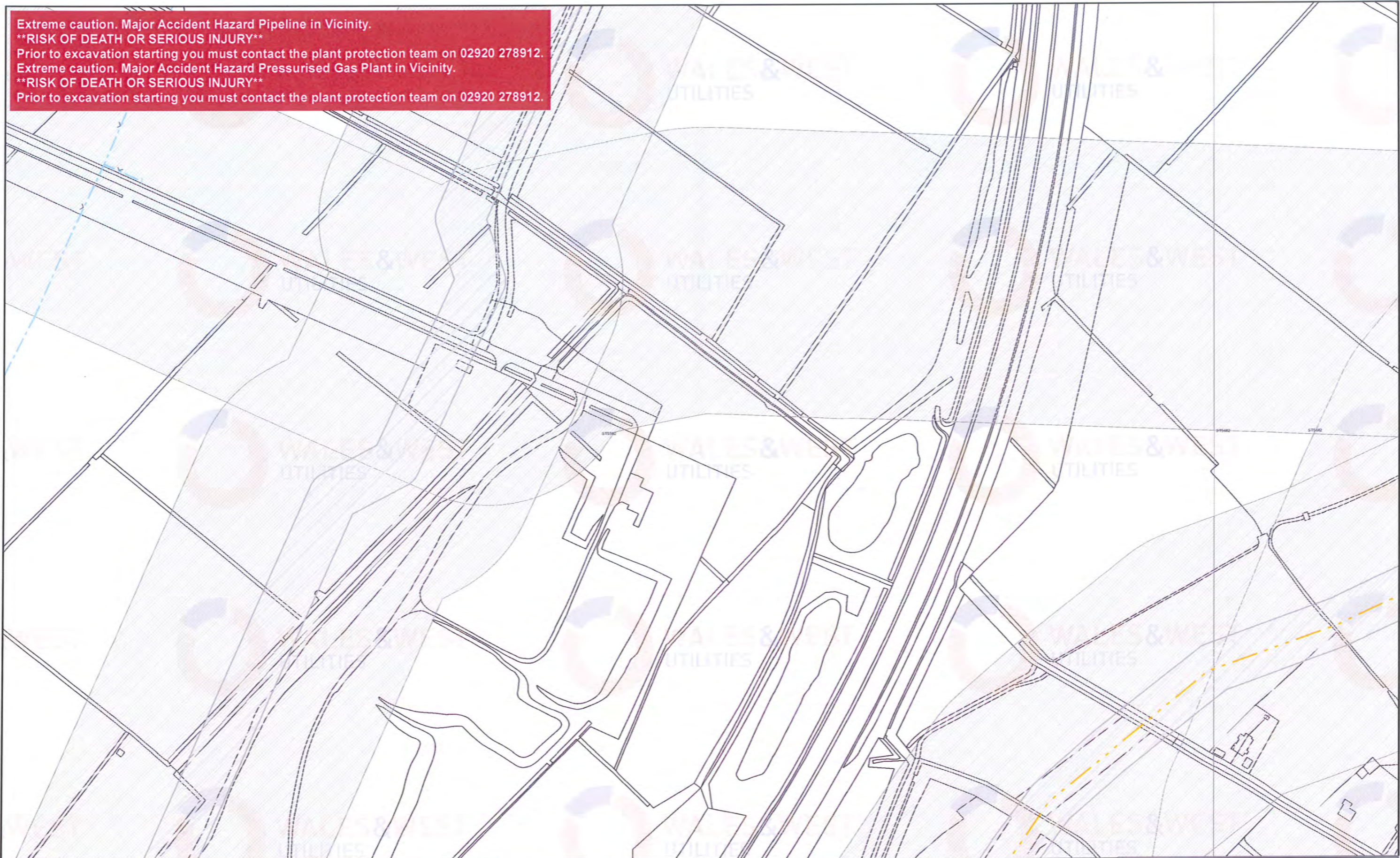
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Extreme caution. Major Accident Hazard Pressurised Gas Plant in Vicinity.
****RISK OF DEATH OR SERIOUS INJURY****
 Prior to excavation starting you must contact the plant protection team on 02920 278912.
Extreme caution. Major Accident Hazard Pipeline in Vicinity.
****RISK OF DEATH OR SERIOUS INJURY****
 Prior to excavation starting you must contact the plant protection team on 02920 278912.



Scale	1 : 2500@A3	TITLE :	 <p>Wales and West Utilities Ltd., Wales and West House, Spooner Close, Celtic Springs, Coedkernew, Newport, NP10 8FZ</p>
User ID	Andrew.R.Dickens	<p>The plan shows those pipes owned by Wales & West Utilities (WUU) in its role as a Licensed Gas Transporter (GT). The information shown on this plan is derived from historic information and may have involved re-scaling plans, and the accuracy of it cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. may not be shown but their presence should be anticipated. No warranties are therefore given in respect of it. WUU its employees and contractors do not accept any liability for any inaccuracy or incompleteness in it.</p>	
Date	29/01/2015	<p>You must use safe digging practices, in accordance with HS(G)47, to establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you or near gas apparatus. The information shown on this plan should not be used beyond 28 days from the date of issue of this plan as it is subject to updating.</p>	
Grid Ref:	Easting: 355226 Northing: 182887	<p>The plan also provides indications of gas pipes owned by other GTs, or otherwise privately owned, which may be present in this area. This information is not information of WUU and WUU is unable to verify this information or to confirm whether it is accurate or complete. It is supplied voluntarily to assist the user in determining whether to make contact with other GTs or others. The user must obtain such information from the other GT or person concerned. WUU, its employees and contractors do not accept any liability for this information or any inaccuracy or incompleteness in it.</p>	
		<p>NRSWA Response</p>	
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<p>Some examples of Plant Items:</p>		<p>Valve  Depth of Cover  Syphon  Diameter Change  Material Change </p>	

Extreme caution. Major Accident Hazard Pipeline in Vicinity.
****RISK OF DEATH OR SERIOUS INJURY****
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 Extreme caution. Major Accident Hazard Pressurised Gas Plant in Vicinity.
****RISK OF DEATH OR SERIOUS INJURY****
 Prior to excavation starting you must contact the plant protection team on 02920 278912.



Scale	1 : 2500@A3
User ID	Andrew.R.Dickens
Date	29/01/2015
Grid Ref:	Easting: 355638 Northing: 182492
NRSWA Response	

Low Pressure	IGT/Other Polygon
Medium Pressure	Contact Zones
Intermediate Pressure	NTS Pipeline
High Pressure	

Some examples of Plant Items:

Valve	Depth of Cover	Syphon	Diameter Change	Material Change
-------	----------------	--------	-----------------	-----------------

TITLE:

The plan shows those pipes owned by Wales & West Utilities (WU) in its role as a Licensed Gas Transporter (GT). The information shown on this plan is derived from historic information and may have involved re-scaling plans, and the accuracy of it cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. may not be shown but their presence should be anticipated. No warranties are therefore given in respect of it. WU its employees and contractors do not accept any liability for any inaccuracy or incompleteness in it.

You must use safe digging practices, in accordance with HS(G)47, to establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you or near gas apparatus. The information shown on this plan should not be used beyond 28 days from the date of issue of this plan as it is subject to updating.








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Wales and West Utilities Ltd., Wales and West House, Spooner Close, Celtic Springs, Coedkernew, Newport, NP10 8FZ

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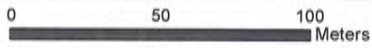






Extreme caution. Major Accident Hazard Pipeline in Vicinity.
****RISK OF DEATH OR SERIOUS INJURY****
 Prior to excavation starting you must contact the plant protection team on 02920 278912.



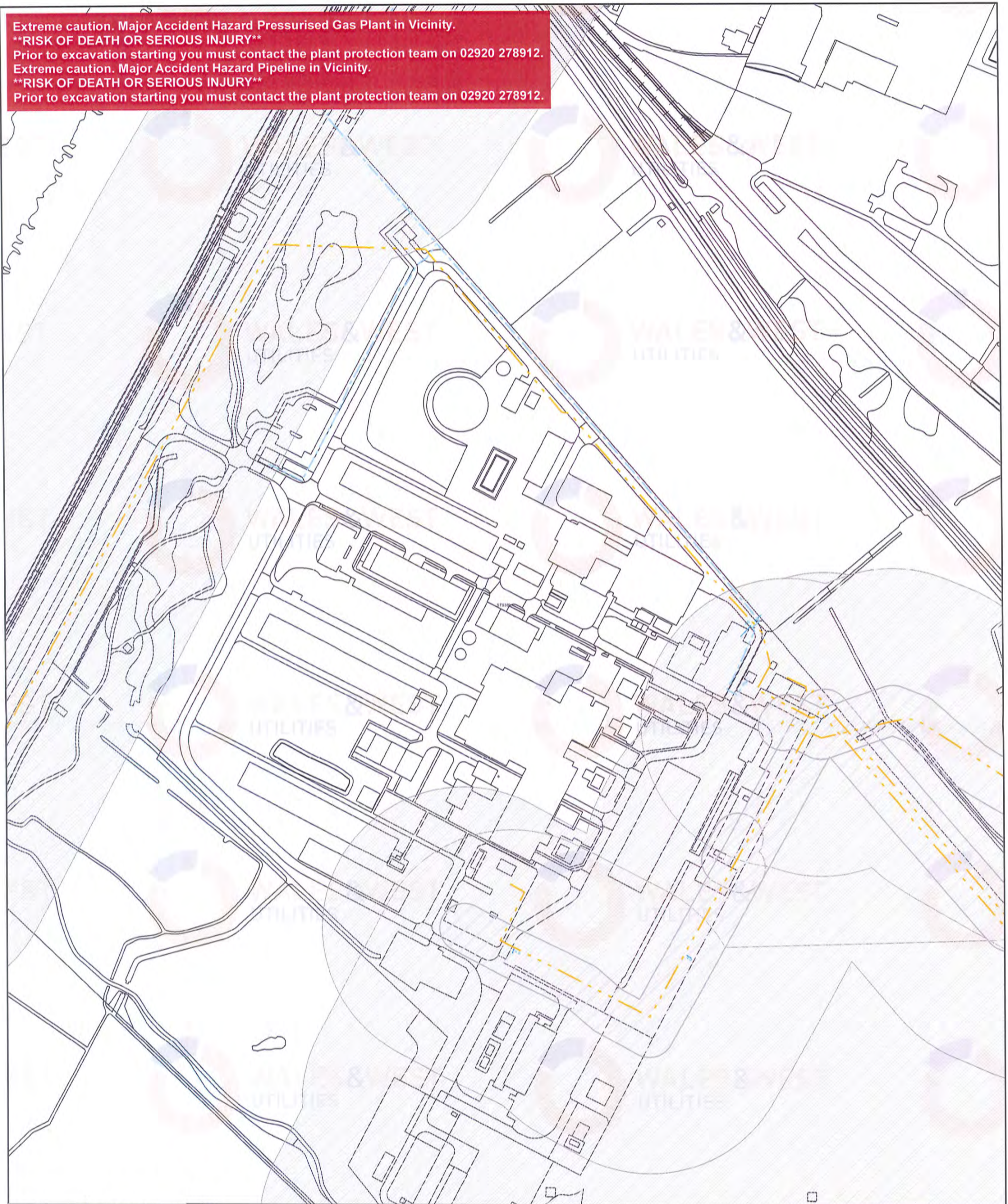
Scale	1 : 2500@A3	TITLE :	 <p>Wales and West Utilities Ltd., Wales and West House, Spooner Close, Celtic Springs, Coedkernew, Newport, NP10 8FZ</p>
User ID	Andrew.R.Dickens	<p>The plan shows those pipes owned by Wales & West Utilities (WVU) in its role as a Licensed Gas Transporter (GT). The information shown on this plan is derived from historic information and may have involved re-scaling plans, and the accuracy of it cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. may not be shown but their presence should be anticipated. No warranties are therefore given in respect of it. WVU its employees and contractors do not accept any liability for any inaccuracy or incompleteness in it.</p>	
Date	29/01/2015	<p>You must use safe digging practices, in accordance with HS(G)47, to establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you or near gas apparatus. The information shown on this plan should not be used beyond 28 days from the date of issue of this plan as it is subject to updating.</p>	
Grid Ref:	Easting: 354805 Northing: 181642	<p>The plan also provides indications of gas pipes owned by other GTs, or otherwise privately owned, which may be present in this area. This information is not information of WVU and WVU is unable to verify this information or to confirm whether it is accurate or complete. It is supplied voluntarily to assist the user in determining whether to make contact with other GTs or others. The user must obtain such information from the other GT or person concerned. WVU, its employees and contractors do not accept any liability for this information or any inaccuracy or incompleteness in it.</p>	
		<p>N</p> <p>0 50 100 Meters</p> <p>Some examples of Plant Items:</p> <p>Valve  Depth of Cover  Syphon  Diameter Change  Material Change </p>	
			<p>NRSWA Response</p> <p>© All MasterMap data is reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database right 2015. All rights reserved. Ordnance Survey Licence number 0100044308.</p>

Extreme caution. Major Accident Hazard Pipeline in Vicinity.
****RISK OF DEATH OR SERIOUS INJURY****
 Prior to excavation starting you must contact the plant protection team on 02920 278912.



Scale	1 : 2500@A3	TITLE :	 <p>WALES & WEST UTILITIES</p> <p>Wales and West Utilities Ltd., Wales and West House, Spooner Close, Celtic Springs, Coedkernew, Newport, NP10 8FZ</p>
User ID	Andrew.R.Dickens	<p>The plan shows those pipes owned by Wales & West Utilities (WUU) in its role as a Licensed Gas Transporter (GT). The information shown on this plan is derived from historic information and may have involved re-scaling plans, and the accuracy of it cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. may not be shown but their presence should be anticipated. No warranties are therefore given in respect of it. WUU its employees and contractors do not accept any liability for any inaccuracy or incompleteness in it.</p>	
Date	29/01/2015	<p>You must use safe digging practices, in accordance with HS(G)47, to establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you or near gas apparatus. The information shown on this plan should not be used beyond 28 days from the date of issue of this plan as it is subject to updating.</p>	
Grid Ref:	Easting: 354235 Northing: 181940	<p>The plan also provides indications of gas pipes owned by other GTs, or otherwise privately owned, which may be present in this area. This information is not information of WUU and WUU is unable to verify this information or to confirm whether it is accurate or complete. It is supplied voluntarily to assist the user in determining whether to make contact with other GTs or others. The user must obtain such information from the other GT or person concerned. WUU, its employees and contractors do not accept any liability for this information or any inaccuracy or incompleteness in it.</p>	
			
		<p>Some examples of Plant Items:</p> <p>Valve  Depth of Cover  Syphon  Diameter Change  Material Change </p>	
			<p>NRSWA Response</p> <p><small>© All MasterMap data is reproduced by permission of Ordnance Survey on behalf of HMSO. © Crown copyright and database right 2015. All rights reserved. Ordnance Survey Licence number 0100044308.</small></p>

Extreme caution. Major Accident Hazard Pressurised Gas Plant in Vicinity.
****RISK OF DEATH OR SERIOUS INJURY****
 Prior to excavation starting you must contact the plant protection team on 02920 278912.
Extreme caution. Major Accident Hazard Pipeline in Vicinity.
****RISK OF DEATH OR SERIOUS INJURY****
 Prior to excavation starting you must contact the plant protection team on 02920 278912.



Scale	1 : 2500@A3
User ID	Andrew R.Dickens
Date	29/01/2015
Grid Ref:	Easting: 353615 Northing: 182558

TITLE :

The plan shows those pipes owned by Wales & West Utilities (WUU) in its role as a Licensed Gas Transporter (GT). The information shown on this plan is derived from historic information and may have involved re-scaling plans, and the accuracy of it cannot be guaranteed. Service pipes, valves, syphons, stub connections, etc. may not be shown but their presence should be anticipated. No warranties are therefore given in respect of it. WUU its employees and contractors do not accept any liability for any inaccuracy or incompleteness in it.

You must use safe digging practices, in accordance with HS(G)47, to establish the actual position of mains, pipes, services and other apparatus on site before any mechanical plant is used. It is your responsibility to ensure that this information is provided to all persons (either direct labour or contractors) working for you or near gas apparatus. The information shown on this plan should not be used beyond 28 days from the date of issue of this plan as it is subject to updating.

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WALES & WEST UTILITIES

Wales and West Utilities Ltd., Wales and West House, Spooner Close, Celtic Springs, Coedkernew, Newport, NP10 8FZ

	Low Pressure
	Medium Pressure
	Intermediate Pressure
	High Pressure
	IGT/Other Polygon
	Contact Zones
	NTS Pipeline

Some examples of Plant Items:

	Valve		Depth of Cover		Syphon		Diameter Change		Material Change
--	-------	--	----------------	--	--------	--	-----------------	--	-----------------

0 50 100 Meters

N

NRSWA Response

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Email: developmentmanagementnorth@wiltshire.gov.uk
www.wiltshire.gov.uk

19 Februray 2014

Application Ref: EN010034
Site Address Avon Power Station 950 MW Output project

Dear Sirs,

I refer to your letter dated 27th January 2015 regarding the above proposed application. Having reviewed the Environmental Impact Assessment (EIA) Scoping Report submitted by Scottish Power Regeneration Limited it has been concluded that the scheme is not anticipated to have any direct or indirect impacts on Wiltshire. Therefore, we do not feel it would be appropriate to comment on the scope of the EIA.

If you have any further enquiries on the matter, please do not hesitate to contact me.

Yours faithfully,

Sam Croft
Senior Planning Officer

APPENDIX 3

Presentation of the Environmental Statement

APPENDIX 3

PRESENTATION OF THE ENVIRONMENTAL STATEMENT

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (SI 2264) (as amended) sets out the information which must be provided for an application for a development consent order (DCO) for nationally significant infrastructure under the Planning Act 2008. Where required, this includes an environmental statement. Applicants may also provide any other documents considered necessary to support the application. Information which is not environmental information need not be replicated or included in the ES.

An environmental statement (ES) is described under the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (SI 2263) (as amended) (the EIA Regulations) as a statement:

- a) 'that includes such of the information referred to in Part 1 of Schedule 4 as is reasonably required to assess the environmental effects of the development and of any associated development and which the applicant can, having regard in particular to current knowledge and methods of assessment, reasonably be required to compile; but
- b) that includes at least the information required in Part 2 of Schedule 4'.

(EIA Regulations Regulation 2)

The purpose of an ES is to ensure that the environmental effects of a proposed development are fully considered, together with the economic or social benefits of the development, before the development consent application under the Planning Act 2008 is determined. The ES should be an aid to decision making.

The Secretary of State advises that the ES should be laid out clearly with a minimum amount of technical terms and should provide a clear objective and realistic description of the likely significant impacts of the proposed development. The information should be presented so as to be comprehensible to the specialist and non-specialist alike. The Secretary of State recommends that the ES be concise with technical information placed in appendices.

ES Indicative Contents

The Secretary of State emphasises that the ES should be a 'stand alone' document in line with best practice and case law. The EIA Regulations Schedule 4, Parts 1 and 2, set out the information for inclusion in environmental statements.

Schedule 4 Part 1 of the EIA Regulations states this information includes:

- '17. *Description of the development, including in particular—*

- (a) *a description of the physical characteristics of the whole development and the land-use requirements during the construction and operational phases;*
 - (b) *a description of the main characteristics of the production processes, for instance, nature and quantity of the materials used;*
 - (c) *an estimate, by type and quantity, of expected residues and emissions (water, air and soil pollution, noise, vibration, light, heat, radiation, etc) resulting from the operation of the proposed development.*
18. *An outline of the main alternatives studied by the applicant and an indication of the main reasons for the applicant's choice, taking into account the environmental effects.*
19. *A description of the aspects of the environment likely to be significantly affected by the development, including, in particular, population, fauna, flora, soil, water, air, climatic factors, material assets, including the architectural and archaeological heritage, landscape and the interrelationship between the above factors.*
20. *A description of the likely significant effects of the development on the environment, which should cover the direct effects and any indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, positive and negative effects of the development, resulting from:*
- (a) *the existence of the development;*
 - (b) *the use of natural resources;*
 - (c) *the emission of pollutants, the creation of nuisances and the elimination of waste,*
- and the description by the applicant of the forecasting methods used to assess the effects on the environment.*
21. *A description of the measures envisaged to prevent, reduce and where possible offset any significant adverse effects on the environment.*
22. *A non-technical summary of the information provided under paragraphs 1 to 5 of this Part.*
23. *An indication of any difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information'.*

EIA Regulations Schedule 4 Part 1

The content of the ES must include as a minimum those matters set out in Schedule 4 Part 2 of the EIA Regulations. This includes the consideration of 'the main alternatives studied by the applicant' which the Secretary of State recommends could be addressed as a separate chapter in the ES. Part 2 is included below for reference:

Schedule 4 Part 2

- A description of the development comprising information on the site, design and size of the development
- A description of the measures envisaged in order to avoid, reduce and, if possible, remedy significant adverse effects
- The data required to identify and assess the main effects which the development is likely to have on the environment
- An outline of the main alternatives studied by the applicant and an indication of the main reasons for the applicant's choice, taking into account the environmental effects, and
- A non-technical summary of the information provided [*under the four paragraphs above*].

Traffic and transport is not specified as a topic for assessment under Schedule 4; although in line with good practice the Secretary of State considers it is an important consideration *per se*, as well as being the source of further impacts in terms of air quality and noise and vibration.

Balance

The Secretary of State recommends that the ES should be balanced, with matters which give rise to a greater number or more significant impacts being given greater prominence. Where few or no impacts are identified, the technical section may be much shorter, with greater use of information in appendices as appropriate.

The Secretary of State considers that the ES should not be a series of disparate reports and stresses the importance of considering inter-relationships between factors and cumulative impacts.

Scheme Proposals

The scheme parameters will need to be clearly defined in the draft DCO and therefore in the accompanying ES which should support the application as described. The Secretary of State is not able to entertain material changes to a project once an application is submitted. The Secretary of State draws the attention of the applicant to the DCLG and the Planning Inspectorate's published advice on the preparation of a draft DCO and accompanying application documents.

Flexibility

The Secretary of State acknowledges that the EIA process is iterative, and therefore the proposals may change and evolve. For example, there may be changes to the scheme design in response to consultation. Such changes should be addressed in the ES. However, at the time of the application for a DCO, any proposed scheme parameters should not be so wide ranging as to represent effectively different schemes.

It is a matter for the applicant, in preparing an ES, to consider whether it is possible to assess robustly a range of impacts resulting from a large number of undecided parameters. The description of the proposed development in the ES must not be so wide that it is insufficiently certain to comply with requirements of paragraph 17 of Schedule 4 Part 1 of the EIA Regulations.

The Rochdale Envelope principle (see *R v Rochdale MBC ex parte Tew (1999)* and *R v Rochdale MBC ex parte Milne (2000)*) is an accepted way of dealing with uncertainty in preparing development applications. The applicant's attention is drawn to the Planning Inspectorate's Advice Note 9 'Rochdale Envelope' which is available on the Advice Note's page of the National Infrastructure Planning website.

The applicant should make every attempt to narrow the range of options and explain clearly in the ES which elements of the scheme have yet to be finalised and provide the reasons. Where some flexibility is sought and the precise details are not known, the applicant should assess the maximum potential adverse impacts the project could have to ensure that the project as it may be constructed has been properly assessed.

The ES should be able to confirm that any changes to the development within any proposed parameters would not result in significant impacts not previously identified and assessed. The maximum and other dimensions of the proposed development should be clearly described in the ES, with appropriate justification. It will also be important to consider choice of materials, colour and the form of the structures and of any buildings. Lighting proposals should also be described.

Scope

The Secretary of State recommends that the physical scope of the study areas should be identified under all the environmental topics and should be sufficiently robust in order to undertake the assessment. The extent of the study areas should be on the basis of recognised professional guidance, whenever such guidance is available. The study areas should also be agreed with the relevant consultees and local authorities and, where this is not possible, this should be stated clearly in the ES and a reasoned justification given. The scope should also cover the breadth of the topic area and the temporal scope, and these aspects should be described and justified.

Physical Scope

In general the Secretary of State recommends that the physical scope for the EIA should be determined in the light of:

- the nature of the proposal being considered
- the relevance in terms of the specialist topic

- the breadth of the topic
- the physical extent of any surveys or the study area, and
- the potential significant impacts.

The Secretary of State recommends that the physical scope of the study areas should be identified for each of the environmental topics and should be sufficiently robust in order to undertake the assessment. This should include at least the whole of the application site, and include all offsite works. For certain topics, such as landscape and transport, the study area will need to be wider. The extent of the study areas should be on the basis of recognised professional guidance and best practice, whenever this is available, and determined by establishing the physical extent of the likely impacts. The study areas should also be agreed with the relevant consultees and, where this is not possible, this should be stated clearly in the ES and a reasoned justification given.

Breadth of the Topic Area

The ES should explain the range of matters to be considered under each topic and this may respond partly to the type of project being considered. If the range considered is drawn narrowly then a justification for the approach should be provided.

Temporal Scope

The assessment should consider:

- environmental impacts during construction works
- environmental impacts on completion/operation of the proposed development
- where appropriate, environmental impacts a suitable number of years after completion of the proposed development (for example, in order to allow for traffic growth or maturing of any landscape proposals), and
- environmental impacts during decommissioning.

In terms of decommissioning, the Secretary of State acknowledges that the further into the future any assessment is made, the less reliance may be placed on the outcome. However, the purpose of such a long term assessment, as well as to enable the decommissioning of the works to be taken into account, is to encourage early consideration as to how structures can be taken down. The purpose of this is to seek to minimise disruption, to re-use materials and to restore the site or put it to a suitable new use. The Secretary of State encourages consideration of such matters in the ES.

The Secretary of State recommends that these matters should be set out clearly in the ES and that the suitable time period for the assessment should be agreed with the relevant statutory consultees.

The Secretary of State recommends that throughout the ES a standard terminology for time periods should be defined, such that for example, 'short term' always refers to the same period of time.

Baseline

The Secretary of State recommends that the baseline should describe the position from which the impacts of the proposed development are measured. The baseline should be chosen carefully and, whenever possible, be consistent between topics. The identification of a single baseline is to be welcomed in terms of the approach to the assessment, although it is recognised that this may not always be possible.

The Secretary of State recommends that the baseline environment should be clearly explained in the ES, including any dates of surveys, and care should be taken to ensure that all the baseline data remains relevant and up to date.

For each of the environmental topics, the data source(s) for the baseline should be set out together with any survey work undertaken with the dates. The timing and scope of all surveys should be agreed with the relevant statutory bodies and appropriate consultees, wherever possible.

The baseline situation and the proposed development should be described within the context of the site and any other proposals in the vicinity.

Identification of Impacts and Method Statement

Legislation and Guidelines

In terms of the EIA methodology, the Secretary of State recommends that reference should be made to best practice and any standards, guidelines and legislation that have been used to inform the assessment. This should include guidelines prepared by relevant professional bodies.

In terms of other regulatory regimes, the Secretary of State recommends that relevant legislation and all permit and licences required should be listed in the ES where relevant to each topic. This information should also be submitted with the application in accordance with the APFP Regulations.

In terms of assessing the impacts, the ES should approach all relevant planning and environmental policy – local, regional and national (and where appropriate international) – in a consistent manner.

Assessment of Effects and Impact Significance

The EIA Regulations require the identification of the 'likely significant effects of the development on the environment' (Schedule 4 Part 1 paragraph 20).

As a matter of principle, the Secretary of State applies the precautionary approach to follow the Court's² reasoning in judging 'significant effects'. In other words 'likely to affect' will be taken as meaning that there is a probability or risk that the proposed development will have an effect, and not that a development will definitely have an effect.

The Secretary of State considers it is imperative for the ES to define the meaning of 'significant' in the context of each of the specialist topics and for significant impacts to be clearly identified. The Secretary of State recommends that the criteria should be set out fully and that the ES should set out clearly the interpretation of 'significant' in terms of each of the EIA topics. Quantitative criteria should be used where available. The Secretary of State considers that this should also apply to the consideration of cumulative impacts and impact inter-relationships.

The Secretary of State recognises that the way in which each element of the environment may be affected by the proposed development can be approached in a number of ways. However it considers that it would be helpful, in terms of ease of understanding and in terms of clarity of presentation, to consider the impact assessment in a similar manner for each of the specialist topic areas. The Secretary of State recommends that a common format should be applied where possible.

Inter-relationships between environmental factors

The inter-relationship between aspects of the environments likely to be significantly affected is a requirement of the EIA Regulations (see Schedule 4 Part 1 of the EIA Regulations). These occur where a number of separate impacts, e.g. noise and air quality, affect a single receptor such as fauna.

The Secretary of State considers that the inter-relationships between factors must be assessed in order to address the environmental impacts of the proposal as a whole. This will help to ensure that the ES is not a series of separate reports collated into one document, but rather a comprehensive assessment drawing together the environmental impacts of the proposed development. This is particularly important when considering impacts in terms of any permutations or parameters to the proposed development.

Cumulative Impacts

The potential cumulative impacts with other major developments will need to be identified, as required by the Directive. The significance of such impacts should be shown to have been assessed against the baseline position (which would include built and operational development). In

² See Landelijke Vereniging tot Behoud van de Waddenzee and Nederlandse Vereniging tot Bescherming van Vogels v Staatssecretaris van Landbouw (Waddenzee Case No C 127/02/2004)

assessing cumulative impacts, other major development should be identified through consultation with the local planning authorities and other relevant authorities on the basis of those that are:

- projects that are under construction
- permitted application(s) not yet implemented
- submitted application(s) not yet determined
- all refusals subject to appeal procedures not yet determined
- projects on the National Infrastructure's programme of projects, and
- projects identified in the relevant development plan (and emerging development plans - with appropriate weight being given as they move closer to adoption) recognising that much information on any relevant proposals will be limited.

Details should be provided in the ES, including the types of development, location and key aspects that may affect the EIA and how these have been taken into account as part of the assessment.

The Secretary of State recommends that offshore wind farms should also take account of any offshore licensed and consented activities in the area, for the purposes of assessing cumulative effects, through consultation with the relevant licensing/consenting bodies.

For the purposes of identifying any cumulative effects with other developments in the area, applicants should also consult consenting bodies in other EU states to assist in identifying those developments (see commentary on Transboundary Effects below).

Related Development

The ES should give equal prominence to any development which is related with the proposed development to ensure that all the impacts of the proposal are assessed.

The Secretary of State recommends that the applicant should distinguish between the proposed development for which development consent will be sought and any other development. This distinction should be clear in the ES.

Alternatives

The ES must set out an outline of the main alternatives studied by the applicant and provide an indication of the main reasons for the applicant's choice, taking account of the environmental effect (Schedule 4 Part 1 paragraph 18).

Matters should be included, such as *inter alia* alternative design options and alternative mitigation measures. The justification for the final choice and evolution of the scheme development should be made clear. Where other sites have been considered, the reasons for the final choice should be addressed.

The Secretary of State advises that the ES should give sufficient attention to the alternative forms and locations for the off-site proposals, where appropriate, and justify the needs and choices made in terms of the form of the development proposed and the sites chosen.

Mitigation Measures

Mitigation measures may fall into certain categories namely: avoid; reduce; compensate or enhance (see Schedule 4 Part 1 paragraph 21); and should be identified as such in the specialist topics. Mitigation measures should not be developed in isolation as they may relate to more than one topic area. For each topic, the ES should set out any mitigation measures required to prevent, reduce and where possible offset any significant adverse effects, and to identify any residual effects with mitigation in place. Any proposed mitigation should be discussed and agreed with the relevant consultees.

The effectiveness of mitigation should be apparent. Only mitigation measures which are a firm commitment and can be shown to be deliverable should be taken into account as part of the assessment.

It would be helpful if the mitigation measures proposed could be cross referred to specific provisions and/or requirements proposed within the draft development consent order. This could be achieved by means of describing the mitigation measures proposed either in each of the specialist reports or collating these within a summary section on mitigation.

The Secretary of State advises that it is considered best practice to outline in the ES, the structure of the environmental management and monitoring plan and safety procedures which will be adopted during construction and operation and may be adopted during decommissioning.

Cross References and Interactions

The Secretary of State recommends that all the specialist topics in the ES should cross reference their text to other relevant disciplines. Interactions between the specialist topics is essential to the production of a robust assessment, as the ES should not be a collection of separate specialist topics, but a comprehensive assessment of the environmental impacts of the proposal and how these impacts can be mitigated.

As set out in EIA Regulations Schedule 4 Part 1 paragraph 23, the ES should include an indication of any technical difficulties (technical deficiencies or lack of know-how) encountered by the applicant in compiling the required information.

Consultation

The Secretary of State recommends that any changes to the scheme design in response to consultation should be addressed in the ES.

It is recommended that the applicant provides preliminary environmental information (PEI) (this term is defined in the EIA Regulations under regulation 2 'Interpretation') to the local authorities.

Consultation with the local community should be carried out in accordance with the SoCC which will state how the applicant intends to consult on the

preliminary environmental information (PEI). This PEI could include results of detailed surveys and recommended mitigation actions. Where effective consultation is carried out in accordance with Section 47 of the Planning Act, this could usefully assist the applicant in the EIA process – for example the local community may be able to identify possible mitigation measures to address the impacts identified in the PEI. Attention is drawn to the duty upon applicants under Section 50 of the Planning Act to have regard to the guidance on pre-application consultation.

Transboundary Effects

The Secretary of State recommends that consideration should be given in the ES to any likely significant effects on the environment of another Member State of the European Economic Area. In particular, the Secretary of State recommends consideration should be given to discharges to the air and water and to potential impacts on migratory species and to impacts on shipping and fishing areas.

The Applicant's attention is also drawn to the Planning Inspectorate's Advice Note 12 'Development with significant transboundary impacts consultation' which is available on the Advice Notes Page of the National Infrastructure Planning website

Summary Tables

The Secretary of State recommends that in order to assist the decision making process, the applicant may wish to consider the use of tables:

Table X to identify and collate the residual impacts after mitigation on the basis of specialist topics, inter-relationships and cumulative impacts.

Table XX to demonstrate how the assessment has taken account of this Opinion and other responses to consultation.

Table XXX to set out the mitigation measures proposed, as well as assisting the reader, the Secretary of State considers that this would also enable the applicant to cross refer mitigation to specific provisions proposed to be included within the draft Development Consent Order.

Table XXXX to cross reference where details in the HRA (where one is provided) such as descriptions of sites and their locations, together with any mitigation or compensation measures, are to be found in the ES.

Terminology and Glossary of Technical Terms

The Secretary of State recommends that a common terminology should be adopted. This will help to ensure consistency and ease of understanding for the decision making process. For example, 'the site' should be defined

and used only in terms of this definition so as to avoid confusion with, for example, the wider site area or the surrounding site.

A glossary of technical terms should be included in the ES.

Presentation

The ES should have all of its paragraphs numbered, as this makes referencing easier as well as accurate.

Appendices must be clearly referenced, again with all paragraphs numbered.

All figures and drawings, photographs and photomontages should be clearly referenced. Figures should clearly show the proposed site application boundary.

Bibliography

A bibliography should be included in the ES. The author, date and publication title should be included for all references. All publications referred to within the technical reports should be included.

Non Technical Summary

The EIA Regulations require a Non Technical Summary (EIA Regulations Schedule 4 Part 1 paragraph 22). This should be a summary of the assessment in simple language. It should be supported by appropriate figures, photographs and photomontages.